THE RAIN-MAKERS

MARY ROBERTS COOLIDGE

A detailed, scientific, yet completely readable study of the Pueblo Indians and of the picturesque region they inhabit.

$4.00

THE RAIN-MAKERS

By Mary Roberts Coolidge

THE strange and fascinating civilization of the Pueblo Indians is the subject of this absorbing book.

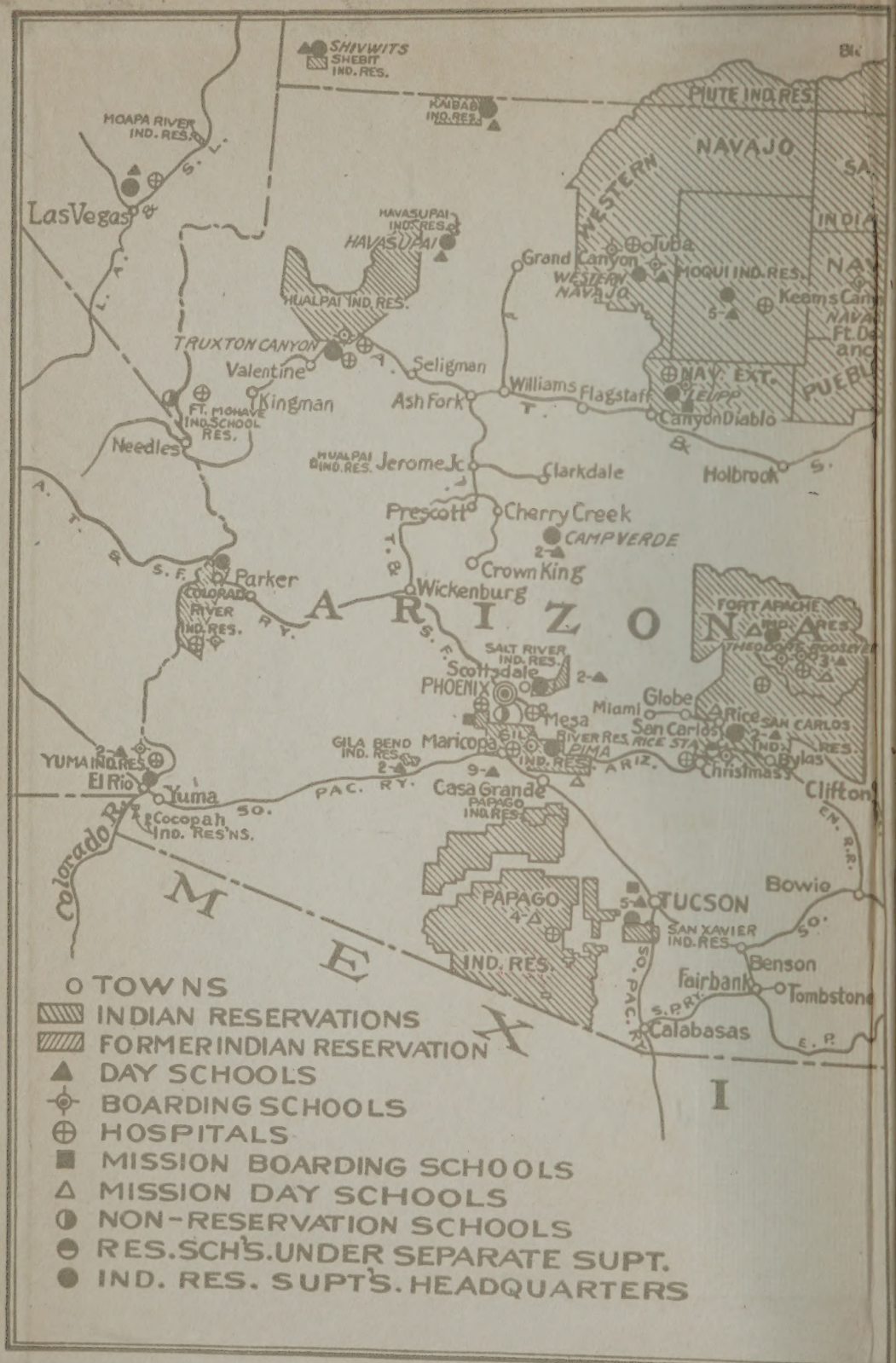
Mrs. Coolidge, who is a member of the State Board of Education of California, has studied the subject for many years. Her book explains why the Indians live as they do, shows the relation of their civilization to the geographical features of the region, and takes up very fully the arts, industries, religious beliefs, and social life of the Pueblo race.

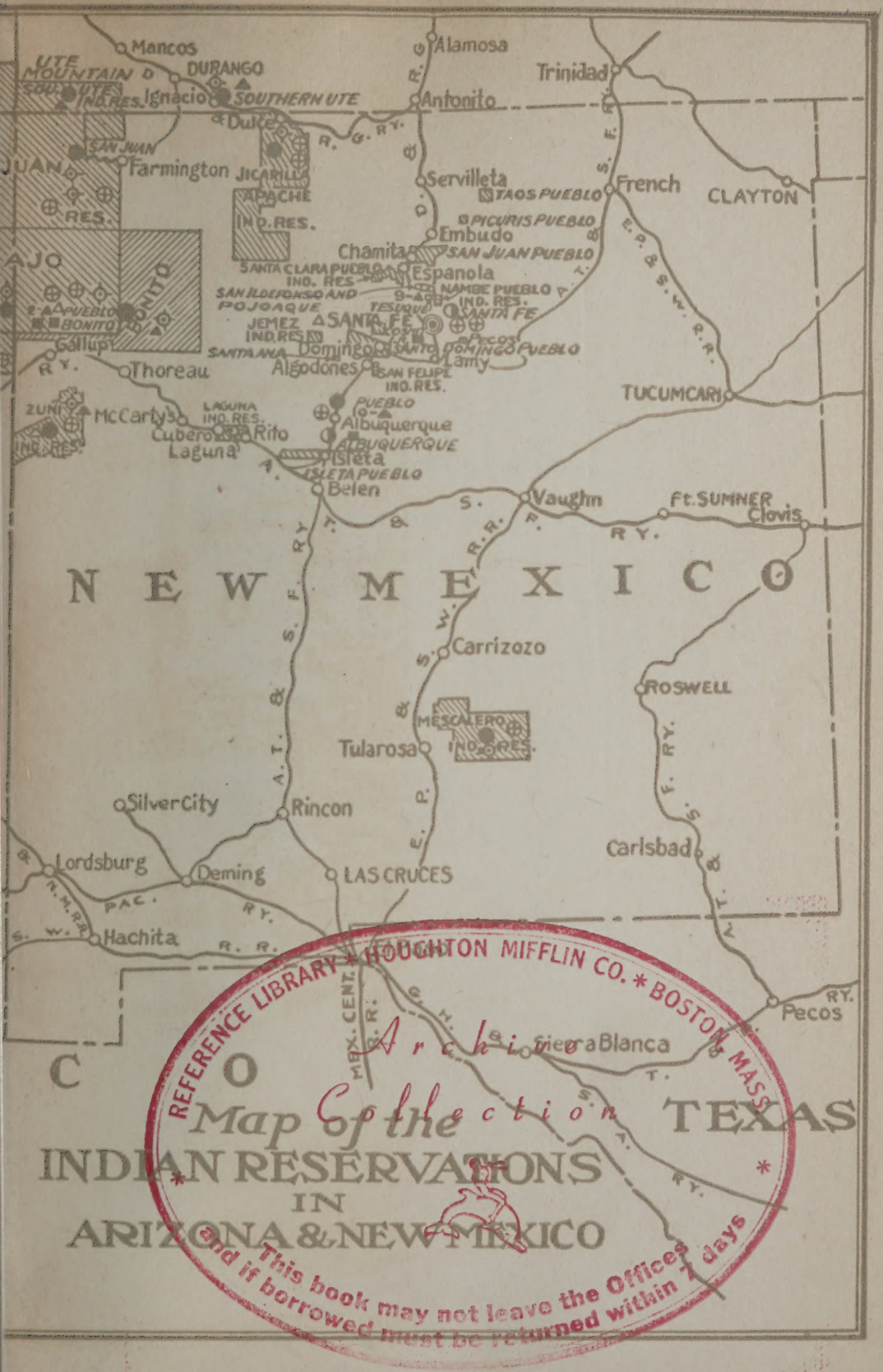
'The Rain-Makers' is comprehensive, scientific, and accurate, yet written so vividly that it will give pleasure to the general reader as well as the expert.

Lavishly illustrated

THE RAIN-MAKERS

MARY ROBERTS COOLIDGE


SHIVWITS
SHEBIT
IND. RES.
KAIBAB
IND. RES.
PIUTE IND. RES.
NAVAJO
MOAPA RIVER
IND. RES.
Las Vegas
HAVASUPAI
IND. RES.
HAVASUPAI
HUALPAI IND. RES.
Grand Canyon
Tuba
MOQUI IND. RES.
WESTERN NAVAJO
TRUXTON CANYON
Valentine
Seligman
Kingman
Ash Fork
Williams
Flagstaff
NAV. EXT.
FLUPP
Canyon Diablo
FT. MOHAVE
IND. SCHOOL
RES.
Needles
HUALPAI
IND. RES.
Jerome Jc
Clarkdale
Holbrook
Prescott
Cherry Creek
CAMP VERDE
Crown King
Parker
COLORADO
RIVER
IND. RES.
Wickenburg
ARIZONA
FORT APACHE
IND. RES.
THEODORE ROOSEVELT
SALT RIVER
IND. RES.
Scottsdale
PHOENIX
Mesa
Miami
Globe
Rice
SAN CARLOS
IND. RES.
San Carlos
RICE STA.
Bylas
Christmas
Clifton
GILA BEND
IND. RES.
Maricopa
GILA RIVER RES.
PIMA
IND. RES.
ARIZ.
YUMA IND. RES.
El Rio
Yuma
PAC. RY.
Casa Grande
PAPAGO
IND. RES.
Cocopah
IND. RES'NS.
Colorado R.
MEXICO
PAPAGO
IND. RES.
TUCSON
SAN XAVIER
IND. RES.
Bowie
Benson
Fairbank
Tombstone
Calabasas
SO. PAC.
S.P.R.Y.
E. P.
EN. R.R.
SO.
TOWNS
INDIAN RESERVATIONS
FORMER INDIAN RESERVATION
DAY SCHOOLS
BOARDING SCHOOLS
HOSPITALS
MISSION BOARDING SCHOOLS
MISSION DAY SCHOOLS
NON-RESERVATION SCHOOLS
RES. SCH'S. UNDER SEPARATE SUPT.
IND. RES. SUPT'S. HEADQUARTERS



REFERENCE LIBRARY * HOUGHTON MIFFLIN CO. * BOSTON, MASS.
Archive Collection
This book may not leave the Offices and if borrowed must be returned within 7 days

THE RAIN-MAKERS

Indians of Arizona and New Mexico

THE SNAKE CEREMONY AT WALPI IN 1913

At right, Harry, the chief snake priest, son of Saalako, snake priestess

THE RAIN-MAKERS

Indians of Arizona and New Mexico

BY

MARY ROBERTS COOLIDGE, PH.D., LITT.D.

WITH ILLUSTRATIONS

BOSTON AND NEW YORK
HOUGHTON MIFFLIN COMPANY
The Riverside Press Cambridge
1929

COPYRIGHT, 1929, BY MARY ROBERTS COOLIDGE

ALL RIGHTS RESERVED

The Riverside Press
CAMBRIDGE · MASSACHUSETTS
PRINTED IN THE U.S.A.

TO

EDGAR LEE HEWETT

ARCHÆOLOGIST

AND

MAKER OF ARCHÆOLOGISTS

CONTENTS

INTRODUCTION: AS THE INDIAN SEES US xi

PART I

THE RAIN-MAKERS IN THE SOUTHWEST

I. INDIANS OF THE DESERT 3
II. RACIAL CHARACTERS AND PHYSIQUE 9
III. WHAT THE SPANIARDS SAW 14
IV. BRIEF HISTORIES OF THE INDIAN PUEBLOS 17

PART II

SOCIAL LIFE AND ORDER IN THE PUEBLOS

V. DWELLINGS AND DRESS 39
VI. FIELDS, FOOD, AND STOCK 47
VII. FAMILY, CLAN, AND CUSTOM 53

PART III

ARTS AND INDUSTRIES OF THE PUEBLOS

VIII. WEAVING AND BASKETRY 69
IX. POTSHERDS AND POTTERY-MAKING 77
X. MODERN INDIAN POTTERY 86
XI. TURQUOISE, SHELL, AND SILVER ORNAMENTS 93
XII. PAINTING IN SANDS AND IN WATER-COLORS 99
XIII. DESIGN, CONVENTION, AND SYMBOLISM 106

PART IV

CEREMONIES AND SONG

XIV. THE SIGNIFICANCE OF THE PUEBLO CEREMONIES 117
XV. CEREMONIAL CALENDAR — ARIZONA PUEBLOS 124

XVI. The Snake Ceremony 131
XVII. The Autumn Ceremonies — Arizona 140
XVIII. Ceremonial Calendar — New Mexico 145
XIX. Ceremonial Chants, Verses, and Melody 152
XX. Ceremonial Games and Education 167

Part V
MYTHOLOGY AND BELIEF

XXI. Myths and Folktales 177
XXII. Those Above and Those Below 195
XXIII. The Ancients and their Origin 205

Part VI
THE NOMAD APACHES

XXIV. Apache Wars and Warriors 221
XXV. Customs and Character of the Apaches 230
XXVI. The Modern Apaches 238

Part VII
THE PASTORAL NAVAJOS

XXVII. The History of the Navajos 247
XXVIII. Navajo Custom and Ceremony 260
XXIX. The Navajo Blanket and Its Weaver 274

Part VIII
DESERT AND RIVER TRIBES

XXX. Tribes of the Lower Desert 293
XXXI. The River Tribes 301
Bibliography 309
Acknowledgments 315
Index 317

ILLUSTRATIONS

The Snake Ceremony at Walpi in 1913 *Frontispiece*

Navajo Horses at Red Lake, Arizona 10

Hopi and Zuñi Runners at Gallup, New Mexico, 1927 10

The Three Pueblos of First Mesa, Arizona: Hano, Sichumovi, and Walpi 16
Photograph by A. M. Cleaveland, 1927

The Kiva at San Ildefonso 28

Taos Pueblo with Typical Summer Thunder-Clouds 28

Typical Baskets 72

Typical Pottery 88

Two Sand Paintings Made by Manuelito, of Red Point 102

Elements of Design Frequently Used by Southwest Indians 108
From a drawing

Bácabi Dancers at the End of the Niman Ceremonial 128

The Snake Dance at Walpi, 1913 134

The Drummers of San Juan during a Ceremony 146

Apache Dancers at the Gallup Ceremonial, 1927 146

Geronimo, the Apache Chief 162
From a reproduction of a photograph by M. E. Fly, Tombstone, Arizona.

Henry Chee-Dodge, Chief of the Navajos 198

Henry Chee-Dodge in front of his Medicine Hogán 198

An Apache Woman with her Baby 236

An Apache Girl 236

Navajo Summer Camp 260

Navajo Woman in Summer Camp with Family, Sheep, and Goats 260

Navajo Woman Weaving at her Outdoor Loom 276
Photograph by C. R. Leupp

Yeibitshai Blanket Woven for Henry Chee-Dodge 276

Except as otherwise indicated the illustrations are from photographs by Dane Coolidge

INTRODUCTION

AS THE INDIAN SEES US

In approaching the Desert Indians, we take it for granted that they, being the conquered race, acknowledge the superiority of the whites. But, as a matter of fact, every Indian in his heart considers himself far above the white man. They are descendants of warriors and have the warrior's pride and dignity. To them we are a nation of unmannerly intruders who force our way into their houses, pluck and stare at everything, and then rush on to see more of what we do not take the trouble to comprehend.

Though not now warriors, the Indians of the Southwest have lived for ages in the midst of enemies. Harried by the predatory Utes from the north, beset by the fierce Comanches of the Plains, and constantly fighting among themselves, they acquired a necessary attitude of self-defense. When the Spaniards came, the Indians were generally friendly — until their experience with them and their Anglo-Saxon successors proved that a defensive habit was also necessary toward these latest comers. Even the peace-loving Pueblos have had to fight for their lands and homes, and they have still the pride and suspicion engendered by wars and encroachment.

The kiva in every village, their most sacred place of ceremonial mysteries, is as much to be respected as the chancel of a Christian church or the lodge of a fraternal order. Yet the Indian watchman must constantly defend it from the curious and the lawless. Many Pueblo men and most Indian women object to

being photographed by any casual person, precisely for the same reason that we should, if a strange kodak amateur should halt us in the street of our town and demand that we pose for him. The modern Indian has learned to submit sometimes, for the sake of a little money, but such behavior merely confirms his opinion of our rudeness.

Indian women are extremely modest and reticent. They do not wish to converse with strange men nor to be questioned concerning the details of their domestic life. Because they are poor and have become a public spectacle to the tourist, they are not therefore pleased by our inquisitiveness. White women in men's clothes are especially incomprehensible to them, offending their primitive concepts of modesty; and white men offend as much by the good-natured familiarity and jokes with which they meet their Indian hosts.

It is Indian custom, when visiting strangers, to bring some little gift and to make return for any present which may be received. It is etiquette to pause a moment before speaking, to speak little and thoughtfully, with great respect for age, and never to contradict a guest no matter how mistaken he may be. When the Indian assents to some distorted interpretation of designs on blanket or bowl, he is merely following his own tradition of courtesy. Sometimes he finds it impossible to explain in his meager English; often he has learned by experience that most white people are very ignorant of Indian custom, or have ideas derived from Cooper or the moving pictures, which it would be hopeless to contradict.

The alien who would understand Indian behavior must first see himself in a measure as he appears to the native. He must exercise humility and have a patient willingness to learn. Above all, he must pay the respect

to Indian ideas, manners, and observance which is due to an ancient, deep-rooted social order. Primitive and strange they may be, but none the less profoundly expressive of men's earlier efforts to adjust themselves to an overwhelming Universe and to build up an orderly community.

THE RAIN-MAKERS

PART I

THE RAIN-MAKERS IN THE SOUTHWEST

The native American, like the Oriental, viewed nature as the great source of all existences; found, in contemplating its orderly processes, the principle for ordering his own life, sought in its mysterious forces not something to be captured and made to serve him, but harmonies that he might share to the profound satisfaction of his soul. His was a life of the spirit; existence in a world of unreality, of mysticism, of naïve, spiritual experience.

Such a mind is the product of vast spaces and solitudes, the play of thought induced by deserts, prairies, mountains, forests, skies, and elemental forces, not yet analyzed, classified, controlled, and reduced to the commonplace.

EDGAR LEE HEWETT

In his own Southwest the Indian is a harmonious element in a landscape that is incomparable in its nobility of color and mass and feeling of the Unchangeable. He never dominates it . . . he belongs there as do the mesas, skies, sunshine, spaces, and other living creatures. He takes his part in it with the clouds, winds, rocks, plants, birds and beasts, with drum beat and chant and symbolic gesture, keeping time with the seasons, moving in orderly procession with nature, holding to the unity of life in all things, seeking no superior place for himself but merely a state of harmony with all created things — the most rhythmic life as far as I know, that is lived among the races of men.

EDGAR LEE HEWETT

THE RAIN-MAKERS

CHAPTER I

INDIANS OF THE DESERT

WATER is the master key of all life in the Southwest. Streams and springs were the primary essentials for survival to wandering bands of primitive mankind. But with increase of numbers struggles arose among them for the best places. Those conquered in the fight fled to less favorable spots, on desert lands or to canyons in the mountains, and were compelled to use their scantier resources with the utmost care. Rainfall, like other features of this arid region, varied freakishly. Though in the high mountains it might amount to as much as thirty inches during the year, it was likely to be only a scant ten or twelve on the mesa tablelands and certain to fall far below that on the southern deserts. Moreover, the rain falls torrentially in violent, brief thunderstorms; and where vegetation is meager and forest lacking, it turns dry washes into rivers for the moment, cutting channels through which the torrent disappears down canyons and into subterranean water levels.

Wherever they might be, primitive peoples who would survive had to find water and to conserve it to the last drops. This of necessity — but, as their intelligence developed, the mysterious elements which surrounded them, and with which they struggled, took on form and personality in their imagination. The Spirits Above might be menacing, niggardly, or benign. To the primi-

tive they appeared to have the power of creating and magically bestowing rainfall, and thus the first and most urgent appeal to the gods was for beneficent rain to ensure fertility of land and survival of its people. To appease the spirits, to invite the attention of their ancestors to the needs of the tribe, these dwellers in the arid regions of the Southwest devised a system of solemn ceremonies for bringing rain. And when the crops made possible by the precious water were harvested, they offered appropriate thanks, by incantations and by dancing before the invisible gods.

All art, all handicraft, all customary living among the desert tribes is permeated with rain significance and must be interpreted through it, whatever else they may afterward signify. Since the short, violent rainy season is infinitely important and never to be certainly counted upon, it has been for ages the Indian's chief thought how to take advantage of erratic rain when it comes, and how to persuade the powers above to grant an abundant downpour. Although in the last century they have to some extent lost the intimate sense of communication with elemental spirits and perhaps forgotten the original meaning of their sacred symbols, the traditional feeling of propriety, of obligation to use them, is still persistent.

On the water jars made by the women are the designs associated with prayers for rain. The Zuñi potter moulds on her bowls two joyous frogs coming to the light after their long hibernation beneath the dry mud of desert swales. The Navajo woman weaves lightning on her blanket, the symbol of rain and plentiful water. The silversmith beats out the wings of the thunderbird, with silver pendants representing drops of water; and everywhere is the sinuous figure of the arrowheaded snake, the friendly messenger of the gods who carries prayers to the underworld. Symbols, ceremonies, and products are

permeated with the arid fact that water is essential to a successful struggle for existence.

Vegetation as well as mankind on the desert shows the limitation imposed by a relatively small and violent rainfall. Although the lovely light green foliage of sycamore and cottonwood along the water courses occasionally gives an appearance of verdure, on the mesas the small hardy, slow-growing piñons, cedars, juniper, scrub oak, greasewood, and mesquite bushes show the effects of hard conditions. On the far mountain plateaus there are forests of yellow pine, but the Indian must chiefly depend for timber and fuel upon the tough little trees that still survive in his neighborhood. Because there was little timber, the Spanish churches, built in the sixteenth and seventeenth centuries at many pueblos, exhibit huge logs in their framework which must have been brought long distances by the incredible labor of many Indians.

Where lower elevations and semi-tropical climate prevail, there are many varieties of cactus and several species of yucca, providing food for small birds and rodents; besides the willow and the devil's-claw (*martynia*) which furnish material for baskets. All these plants have adjusted themselves through ages of selection to a short growing season — at the beginning of the rainy period flowers and grass come up as if by magic. The golden yellow palo verde, the rosy-blooming ocotillo, the brilliant green greasewood, and the gray rabbit bush make the most of their brief winter or summer rain, and then relapse into endurance till another spring. Many stunted, inconspicuous herbs, to be used for healing and medicinal purposes, are gathered and stored by the medicine men and the thrifty Indian housewife.

Animal life like vegetation has been inevitably adapted through the ages to doing with as little water as possible. When white men first appeared, these Indians

of the Southwest had no horses, cattle, or sheep. The buffalo then roamed the Plains beyond the Pecos River; the elk were few in this region and difficult to kill with bow and arrow. For game the Indian had deer in the mountains, antelope on the Plains and on the semi-arid mesas, and small rodents and birds wherever there was scanty vegetation. The quail, the wild turkey, the wood-rat, the cottontail rabbit, and the prairie dog were of infinite economic value.

On a thousand pieces of pottery one sees deer and quail; and the traditional stories told to little boys by their grandfathers around the fire at night show how large a part of Indian life these animals have always been. In them, the coyote — stupid, conceited, and credulous — is always being fooled by the woodpecker and the smart crow; field mice are forever scared because they once gnawed the bowstrings of the giants, or the bonds of a hero, at some critical moment.

The mole and the badger are useful diggers and know the underground ways to safety; the beaver builds bridges for his human friends to escape their enemies; the horned toad knows how to make the good luck arrow head and charms the very stones and trees with his magic song. The eagle — the Thunderbird associated with blessed rain — bears the hero-boy to his house on the highest mountain-tops — therefore all eagles, among the Indians of Isleta, must be left free. The Laguna huntress saves herself by feeding Old Woman Giant with the rabbits she has killed. Owls and squirrels and snakes are messengers between men and gods, and between animals and their human friends, and may be appealed to for aid.

It is necessary, then, to see the Indian in his setting to understand his qualities. And it is even more important to discriminate between the tribes that were moulded by

the Plains and the hunting of the buffalo and these of the Southwest, stamped with the color, the contrasts, the freakish climate, the desert and mountain characters. Indians, like other men, are what they have been made through ages of adaptation — they are what they must be in a given region and a certain stage of social development.

The desert region in which these tribesmen dwelt has gradually become known as 'The Southwest,' signifying to scientist and traveler a natural and clearly defined region south of the higher Rockies and included between two great rivers, the Upper Rio Grande (with its tributary the Pecos) and the Great Colorado with its eastern branches, the San Juan, the Little Colorado, and the Gila. This area of two hundred thousand square miles comprises the southern portion of Utah and Colorado and the whole of Arizona and New Mexico. Within it at the time of the earliest Spanish explorations of the sixteenth century there were sixty-six or more pueblos or villages, besides an unknown number of semi-nomadic and warlike tribes of which the Spaniards knew nothing. Then as now, in this region, there was an incredible number of prehistoric ruins of several differing types, about which the living Indians had legends and historic reminiscences.

A fantastic region of color, contrast, and variability; dominated by high mountains, gashed by superb canyons, scarred with dry washes — the beds of intermittent streams — varied with immense shallow basins, rolling deserts and dreary levels; with bold buttes, flat-topped mesas, occasional forests and verdant valleys along infrequent water courses. In the north there is the giddy drop into the Grand Canyon of the Colorado River. Along the Little Colorado is the Painted Desert, remarkable for the vivid colors of its rocks. Within the

Painted Desert is the Petrified Forest; and everywhere are evidences of strange water and wind erosions and the marks of volcanic upheavals, lava flows, hot springs, and extinct craters.

From mountain peaks of twelve thousand feet or more on the north, the mesa land, averaging six thousand elevation, drops beyond Salt River to the low desert along the Gila. Inevitably there is a wide variety of climate — frost and heavy snows in winter on the higher levels, cool nights and hot days on the lower altitudes, and a long succession of days of dry and crystalline clearness. This clarity of atmosphere and the colorful quality of the landscape — where in places the rock, shales, sandstones, and clays show red, green, brown, blue, purple, yellow, and white — makes every detail stand out and distances very deceptive. The desert dwellers were forever traveling toward the far blue rim, enveloped in desert brilliance, toward mountains of a thousand shades that melt from blue into mauve and green and purple at dawn and at nightfall. Even the scintillating heavens at night were a deep, velvety blue.

In the chapters on arts, design, and religion we shall see the effects of this color and contrast, these fantastic forms and the ruggedness of the landscape, upon the minds of primitive and impressionable peoples.

CHAPTER II

RACIAL CHARACTERS AND PHYSIQUE

Of all the North American Indians the desert-dwelling tribes of Arizona and New Mexico have been least influenced by contact with the whites. The Hopis, the Navajos, the Apaches, the Zuñis, and even some of the Rio Grande Pueblos, remain as yet unconquered by the invasion of white custom and commerce, though long since at peace with the Government of the United States.

The Iroquois of Colonial times and the tribesmen of the Plains have become civilized farmers, and to a considerable degree are assimilated as citizens of their States. They no longer furnish, as in the past, dramatic elements to the imagination of writer, artist, and traveler. But the Indians within the Five Rivers of the Southwest are the direct descendants of prehistoric stocks that originally peopled America; and their physique, their characteristics, and their social life show what living for ages in the desert makes of men.

Whether you call these desert men 'Indians' according to the misnomer given by Columbus, or 'Redskins' with Cooper, or 'Amer-Indians' after the scientist Powell, they were unquestionably the first Americans and still are the most picturesque of living tribesmen. Who they were and how they came to this continent has long been a subject for speculation, but in our generation scientists are substantially agreed that they came from Asia and their ancestors were the same as those of the Mongols. But with ages of wandering, with isolation in groups and change of environment, they came to differ widely from each other in appearance, language, and

custom; and to-day, even in the same tribe, there are many varieties among Indian individuals.

In appearance the American Indian does indeed constitute a general racial type: his skin is of a yellowish brown color, rather than red, his hair straight and black, the eyes brown and like the complexion lighter or darker in tint; his face is rather wide, cheekbones somewhat high, and the head form midway between the long head and the round head of European stocks. But none of these characters is uniform even in a single tribe. Where food conditions have been favorable, the Southwest Indian tends to be tall, averaging five feet eight inches and diminishing, among the low desert dwellers and less fortunate pueblos, to five feet four.

Physically the race is well formed and symmetrical, with extraordinary muscular power and endurance. The women, though often overtaxed by too frequent child-bearing and heavy burdens, are astonishingly strong, walking with grace and poise in spite of, or perhaps because of the weights they must carry. In modern Zuñi the older woman with her two-gallon pottery jar of water on her head, walking steadily up hillsides or on a ladder to her apartment on the upper stories, is a sharp contrast to the Zuñi schoolgirl in her high-heeled laced shoes toiling sidewise with an American bucket. The Indian man by training resembles the race-horse — the woman, by reason of her laborious life, is the draft-horse type.

Many stories are current in the Southwest concerning the performances of Indian runners. An old medicine man of Oraibi pueblo had a small patch of cotton for ceremonial purposes planted at Moenkopi, forty miles from his home, and was accustomed to run out, cultivate this crop, and run back the same day. At Zuñi the villagers backed their best runner against a trained race-

NAVAJO HORSES AT RED LAKE, ARIZONA

HOPI AND ZUÑI RUNNERS AT GALLUP, NEW MEXICO, 1927

horse from Los Angeles and won, over a distance of ten miles. The Navajos frequently walk down wild horses and capture them. In emergencies army officers have preferred a Hopi runner to a man on horseback to carry messages to the distant railroad. The Cocopahs, when hard-pressed for food, walked ten miles into Yuma in midsummer, did a day's work laying adobes, and returned to camp at night.

In recent years the best runners of the Pueblos have tested themselves under conditions quite foreign to these desert trials. Andrew Chimoney, a Zuñi, won the twelve-mile modified Marathon in New York in 1927, from a field of 186, winning by a quarter mile from the best white runners in America. In the 1926 Ceremonial Race at Gallup, New Mexico, he fought a sandstorm for four miles of the twelve and came out only thirty seconds slower than the record made at Madison Square Garden. Still more remarkable is the record of Nicholas Quanawahu, a Hopi Indian of Oraibi, who won, in 1927, the Long Beach Marathon of 26 miles 385 yards, from 234 of the best runners on the western continent.

The Southwest tribes vary as much in language as in physical characteristics. There still remain representatives of at least six linguistic stocks among them: The Navajos and their near relatives, the Apaches, who constitute more than half the Southwestern population, are Athapascans. Seven Hopi villages speak a Shoshonean tongue related to the Ute and Shoshoni in the north. The eighth Hopi village, Hano on the First Mesa, whose people came hither about 1700 from the Upper Rio Grande, still speak the language of their early Tewa neighbors. Zuñi and its three outlying farm villages have a language all their own. Ácoma and Laguna and the five settlements of the Lower Rio Grande use the Keresan dialects. 'But if there is divergence in language,'

says Alexander, 'there is little difference in the degree of aboriginal evolution among the Pueblos.'

The Desert Indian is, then, a unique type of human being produced by ages of dwelling in vast spaces of wildly beautiful landscape, where living must always have been difficult. He has adapted himself to scant rainfall, tough, hardy, vegetable growths, coarse foods and little meat. All these qualities enter into him and have given him a marvelously enduring body, with a keenly observant and contemplative mind. His vitality is enormous — in proportion to weight and amount of food consumed, he has a highly efficient physique. For ages the demands on his muscular energy have been such that only the hardiest could survive. Like the horned toad he could do with the minimum of water. Because he had no beasts of burden, he must carry on his back whatever he would have. Therefore the Indian woman has developed the power to carry babies, water jars, the family impedimenta, while on the trek, to the highest human capacity. And Indian men have acquired extraordinary running capacity in lieu of speedy animals.

Endurance and economy became the essential qualities for tribal survival. Of one thing only did the Indian ever have enough: time! And it still ranks in his life as a matter of small importance. Food for the day or season; a modicum of shelter wherever he might settle; a share in the tribal life; these constituted his minimum essentials. To securing them he devoted all his energy and ingenuity.

Yet primitive peoples, however hard-pressed by a difficult environment, seem always to have craved artistic expression. Indian men painted the skin or carved their weapons. Indian women could not be satisfied to make merely a plain carrying-basket or an unrelieved water vessel. To the inarticulate human spirit, design

and decoration seem to be as necessary as food and drink to the physical body. We can but suppose that this need of beauty was stimulated by the marvelously, fiercely colorful landscape of the Southwest. Just as the solitary mountain sheep often stands on rocky rim or promontory to gaze, so the wild Indians must have come to find pleasure in far, broken horizons, in the play of light and color.

In a world where every smallest seed, fiber, or insect might be made to contribute to human life, nothing could be wasted, all was potentially valuable. In the presence of natural wonders, devoid of that urgency of time with which the white race is possessed, and in spite of economic hardship, the Indian developed the contemplative, philosophic mind. He became what he is to-day: not an accumulator of material things, but a man who enjoys what he has, endures what he must, does not fret, does not resist Nature, and adapts himself to whatever happens. He thinks of himself, not as an individual competing with others for place, but as a being one with his people, one with all animate life, one with the invisible ancestral spirits whose favor he desires. At the end of his fragment of time, he withers away like a desert plant, carrying with him into the underworld his choicest belongings. For to their dead the Indians begrudge nothing.

CHAPTER III

WHAT THE SPANIARDS SAW

To the desert tribes of the Southwest there came suddenly, in the sixteenth century, their first contact with a European race, accustomed to enslave and to convert the primitive peoples whom it conquered. What we know, historically speaking, begins with the arrival of the Conquistadores from Mexico, seeking new lands and the gold which rumor declared existed in abundance at the north. Under the leadership of Coronado in 1540, they reached Ácoma, Zuñi, and the Rio Grande. During the winter they explored the pueblos, saw vast herds of buffalo on the Plains at the east, and visited the Hopi villages at the west. Pedro de Casteñeda, the soldier whose chronicle of the expedition is the chief authority, enumerated sixty-six villages in the region of the Rio Grande — from Taos and Picuris at the north to Zuñi and its seven outlying villages, scattered over a distance of three hundred and forty miles. He estimated the population at twenty thousand, and it was evident, from the hundreds of abandoned and ruined settlements, that the Indians had long been declining in numbers.

It is no part of the purpose of this book to recount the history of the Spanish Conquest. The Indians, at first friendly, then terrified and outraged, fought as best they knew and were ultimately subdued. During the century from 1580 to 1680, in which the Spanish colonies in New Mexico were founded and the Roman Catholic missionaries labored to Christianize the conquered pueblos, many churches were built. But to a primitive, free, and democratic people, the medieval treatment of the

European colonists must, in any case, have seemed oppressive. No chronicler arose to tell what the Indians thought, but from the Spaniards themselves we learn that the priests suppressed native religion and ceremonies and Spanish soldiers compelled the Indians to labor at hateful tasks, treating them altogether as a conquered people. The resentment against Spanish rule culminated in the vain rebellion of 1680, which still further diminished their numbers, but ultimately brought some alleviation of their oppressions.

Albert Vincent Kidder has thus summarized their unhappy situation:

> In the sixteenth century the Pueblos had fallen upon hard times; they had been forced from their old ranges, were reduced in numbers, and had lost something of their former skill in material accomplishments. But their customs had not changed, and they still held out undismayed among their savage enemies. There can be little doubt that, had they been allowed to work out their own salvation, they would eventually have overcome their difficulties, and might well have built up a civilization of a sort not yet attempted by any group of men.
>
> It is the tragedy of native American history that so much human effort has come to naught, and that so many hopeful experiments in life and living were cut short by the devastating blight of the white man's arrival.

The nomadic tribes were as yet undiscovered. What the Spaniards saw in the Southwest was the native, aboriginal Indian, a race of Oriental lineage, modified by ages of desert-dwelling into a definitely adapted type; living in community houses, with highly perfected handicrafts, arts, religious ceremonies, and social customary organization. What we see now, after four hundred years, are what remains of twenty-six of the sixty-six pueblos enumerated in the Spanish chronicles: diminished in size, altered by the shock of conquest, the

discouragement of subjugation and inevitable changes of habit.

Since the middle of the nineteenth century, explorers, military and Government officials, scientists, artists and humanitarians, have been accumulating, in lieu of history, a first-hand knowledge of the Indian as he still is, before his social customs and the drama, the poetry, the mythology — the Desert Essence that he is — shall be submerged by Western civilization.

The twenty-six pueblos shown on the accompanying map, may be classified by location from north to south and in relation to the Rio Grande and the principal towns of the region:

On the Upper Rio Grande and in the region of Santa Fé are Taos, Picuris, San Juan, Santa Clara, Pojuaque, Nambe, San Ildefonso, Tesuque, Jemez, Sandia.

In the vicinity of Albuquerque and the Lower Rio Grande are San Felipe, Cochiti, Santo Domingo, Sia, Isleta, Laguna, Ácoma.

South of Gallup, New Mexico, are Zuñi and its three outlying agricultural villages, Pescado, Nutria, Ojo Caliente.

North of Flagstaff and Winslow, Arizona, are the Hopi pueblos, located as follows:

First (easternmost) Mesa: Hano, Sichumovi, Walpi.

Second (middle) Mesa: Shipaulovi, Mishongovi, Shimopovi.

Third (westernmost) Mesa: Oraibi and its offshoots, Hotavila, Bacabi, Moenkopi.

For convenient reference the twenty-six pueblos have been alphabetically arranged in the next chapter with the historical information concerning each of them. Fortunately, the Indian and Spanish place names have not been anglicized in usage and the Spanish pronunciation has therefore been indicated.

THE THREE PUEBLOS OF FIRST MESA, ARIZONA

Centre front is Hano; behind it is Sichumovi; at the farther end is Walpi, where the Snake Ceremony takes place in the odd-numbered years

CHAPTER IV

BRIEF HISTORIES OF THE INDIAN PUEBLOS

(ALPHABETICALLY ARRANGED)

Ácoma (ako, white rock), a Keresan pueblo situated on a rock mesa three hundred and fifty-seven feet high, sixty miles west of the Rio Grande and about twenty miles southwest of Laguna Station. Said by F. W. Hodge to be the oldest inhabited settlement in the United States and first seen by Alvarado in 1540. In 1599, the village was attacked by the Spaniards, resisted vigorously, and was partly burned. The people of this pueblo took part in the Indian revolt against Spanish rule in 1680, but, because of the inaccessibility and isolation of their rock fortress, suffered less than other pueblos.

The village is built of three-story houses, of rubble and clay material, terraced back from three parallel streets. Water is supplied from rock cisterns in the streets or is carried by women up steep trails from wells below on the plain. The huge Roman church built in 1699 is remarkable for its heavy timbers brought by the Indians from forests many miles away, and for its retaining walls of great height and strength.

The population, declining from fifteen hundred in 1680 to five hundred in 1905, is now increasing and numbers about nine hundred. In many Ácoma families the young men no longer live on the top of the mesa, but are scattered along the San José River and the railway, on their farm holdings. With this spreading out there is a certain weakening of community spirit.

The people of Ácoma live chiefly by agriculture: corn,

wheat, melons, etc., raised by irrigation on outlying farms; and by stock-raising — sheep, goats, horses, donkeys, and, recently, cattle. Formerly the women made pottery of very fine clay and light weight with interesting designs, but the industry has declined somewhat in recent times. In prehistoric times the pueblo kept flocks of domesticated turkeys.

A fiesta is held on San Juan's Day, June 24, at which the Gallo race — chicken-pull — is a feature. The most important festival occurs on Saint Stephen's Day, September 2. Much has been written about this dramatic pueblo. (See Charles F. Lummis, in 'The Spanish Pioneers,' and Mrs. William Sedgwick's authoritative book 'Ácoma,' 1926.)

BÁCABI, a modern Hopi village, an offshoot of Oraibi (which see) and about five miles distant from it. It is composed of a few families who finally yielded to the United States Indian Bureau in the matter of placing their children in school. Good basket-plaques are made here.

COCHITÍ (Ko-chi-tee'), a Keresan tribe of the same ancestral stock as the people of San Felipe, situated on the west bank of the Rio Grande, ten miles from Domingo Station and twenty-seven miles southwest of Santa Fé. They believe they are the descendants of the cliff-dwellers of Rito de los Frijoles. In the rebellion of 1680, they took an active part and were conquered by De Vargas in 1696. There is here the Mission of Santo Buenaventura; and the scientist and explorer, Adolph F. Bandelier, lived here for several years. The houses of the pueblo are one-story and separate, the kiva circular. The present population numbers five hundred and sixty-one, and is intensely conservative and somewhat Mexi-

canized. The pottery made by the women, formerly confined to black on white, now often shows some red. The designs employ rain and fruition symbols freely, which often look as if scattered over the vessel. The principal fiesta is held on July 14, Saint Bonaventure's Day. Not far from Cochití is an ancient shrine, on the Potrero de las Vacas, where there is a pair of sculptured stone mountain lions, and an interesting cave, the Arena Pintata, with wall paintings in color. (For details of religious and social customs see the scholarly study by Esther Goldfrank, 1927.)

Hano, on the First Mesa, is the easternmost of the Hopi pueblos (*q.v.*). Its people are sometimes called 'The Keepers of the Trail,' because their village is at the top of the most accessible trail. It was settled in the early eighteenth century by Tewa people who came from the Upper Rio Grande, New Mexico, to join forces with the Hopis against the marauding Utes, Apaches, and Navajos, and against the Spaniards. The Tewas intermarried with the Hopis, but retain their language and the art of pottery-making which they brought with them. Nampeyó and her daughter Kwatsoa, the most famous of Arizona Indian pottery-makers, live here.

Hopi (Ho-pee), derived from Hopi-tuh, 'the peaceful ones,' is the name given to seven pueblos, in northeastern Arizona, about one hundred miles north of the railway. Six of them speak a Shoshonean tongue and the seventh — Hano — still speaks the Tewa language. These villages are situated on a desert and mountain reservation of 2,472,329 acres on which they have lived for many centuries and which was set aside for them by the Government in 1882. A popular name 'Moqui,'

perhaps given them by the Navajos and meaning 'dead,' is offensive to them.

This region constituted the Province of Tusayan described by the Spanish chroniclers of the seventeenth century. With the possible exception of Oraibi on the Third Mesa, none of the villages is located on its original site. Several of them, once located in the foothills and lower mesas, were abandoned at the time of the revolt in 1680, from fear of Spanish vengeance and the increasing attacks of Apaches, Navajos, and Utes. The countryside is strewn with the ruins of settlements of earlier tribes with whom they intermarried long ago. (Their characteristics are described in Chapters V to VIII.)

In 1629, a Roman Catholic mission was established at Awatobi, which the Indians destroyed during the rebellion of 1680. No other missions were undertaken until about 1893. At the present time the Mennonites have five chapels at the western pueblos and an orphanage at Tuba City. Since 1910 a Baptist church has been organized at the First Mesa and missionaries are settled at the Second Mesa. The Hopi are extremely conservative and opposed to the introduction of missions and schools. Most of those who have become Christians live below on the mesa slopes, near the mission stations and schools. There are five Government day schools and one boarding-school on the reservation and most of the children are now in school either here or in the non-reservation boarding-schools. The total population has been nearly stationary, around twenty-three hundred, for a generation.

The Hopis have a rich mythology and an elaborate system of ceremonials (see Chapters XV–XVII), of which the best known are the Flute, the Antelope, and the Snake Ceremonies occurring in August — the Snake

Dance in the odd years at Walpi Pueblo. (See Chapter XVI for description.)

The men follow dry farming, using unique methods which are extraordinarily successful for conserving the scant rainfall (see Chapter VI), and in recent years sheep, goat, and cattle raising have been added. The primitive arts still carried on by women are limited to the making of baskets and eagle plaques at Oraibi and Bácabi, with symbolic designs of whirlwind, butterflies, and kachina figures; and coiled baskets sewed with yucca fiber, on the Second Mesa. Rarely beautiful pottery is made at Hano by the famous Nampeyó and her daughter Kwatsoa.

The controversies which have arisen between the Hopis, the Government officials, and the missionaries may be studied by those interested in the different points of view: in the 'Report on the Problem of Indian Administration,' by Lewis Merriam and his associates (1928); in the writings of Leo Crane, who was Government Agent for some years at Keams Canyon; in the report of G. E. E. Lindquist, made in 1923 for the Committee on Social and Religious Surveys; the travel books of C. F. and E. H. Saunders, artists who lived at the villages for a period; and of Fewkes, Hough, Dorsey, and other scientists, whose studies, strictly non-controversial, are most useful. Details of each Hopi pueblo may be found under their names in the alphabetic list of pueblos: Bácabi, Hano, Hotavila, Mishongovi, Moenkopi, Oraibi, Shimopovi, Shipaulovi, Sichumovi, Walpi.

Isleta (Islet), the largest of the Tanoan pueblos, lies on the west bank of the Rio Grande, thirteen miles south of Albuquerque, along the railway. At the time of the revolt in 1680 the population was about two thousand, of whom five hundred were captured by Governor Otermin.

Many fled to the Hopis in the west, and those who fled with the Spaniards established a new pueblo, Isleta del Sur, near El Paso, Texas.

The original pueblo was rebuilt early in the eighteenth century and became a refuge for the Indians of Ácoma and Laguna when they were driven from home by severe droughts in recent times. The one-story houses, with small green plazitas in front, are picturesquely scattered along the highway. Although there is a large circular kiva remaining, the settlement has lost many of the characteristics of the old-time pueblo. There is a large Roman church and a priest in residence. These Indians are reputed to be the richest of the Pueblos and are excellent farmers, raising corn, alfalfa, fruit, and honey. In 1923, through the construction of a drainage canal by the Government, approximately thirty-eight hundred acres of land were reclaimed for cultivation, and further reclamations are contemplated.

Their pottery is 'only good enough for tourists,' as the available clay is not such as to make fine ware. The people are good traders, thrifty, proud and independent. Here Charles F. Lummis lived for some years, knowing the villagers intimately and writing extensively on their customs and folklore. In 1923, the inhabitants numbered 988. The principal public festival is held on San Augustin's Day, August 28. There are no masked dances and no kachinas.

Jemez (Hay′-mes), a large, Tanoan-speaking pueblo, twenty-five miles northwest of Bernalillo, New Mexico, is picturesquely situated at the mouth of San Diego Canyon, the walls of which are about two thousand feet high. The Jemez people took a prominent part in the revolt against Spanish rule in 1680, having allies in the Navajos, the Zuñis, and the Ácomas, but were finally

conquered in 1696. Those not captured fled to the Navajo country, but after some years in exile returned and rebuilt their village. With the introduction of better irrigation methods by the Spaniards, the seven or more scattered settlements of Jemez concentrated into one community. The houses are two-story, facing two streets; there are threshing floors, and two kivas above-ground in buildings like the houses and without windows or doors. There is also a Roman Catholic mission and a Presbyterian school.

The Jemez were closely allied in language and history with the Pecos, and in 1838 the last five Pecos abandoned their site and came to live at Jemez. The population numbers about 560 and is relatively prosperous, living chiefly by agriculture. Almost every household has a team of horses, and the chief crops are corn, wheat, melons, alfalfa, garden products, chili, gourds, and grapes. The villagers seriously object to the presence of white visitors at their masked dances. The public fiesta occurs on Saint James's Day, November 12, and is dedicated to San Diego, the patron saint of Jemez. (See monograph by Elsie Clews Parsons, 1926.)

Laguna (lagoon), the largest and the last settled of the Keresan pueblos (1697), stands high on the south bank of the San José River, near the main highway, forty-five miles west of Albuquerque, at Laguna Station. Its 1808 inhabitants in 1926 represent four or more different tribal stocks. Owing to the spread of its summer farming settlements, of which Paquate is the largest, the original pueblo is being slowly depopulated. The men are chiefly engaged in stock-raising; the women produce some good pottery in a variety of forms, black and red designs on white ground, but it is not well fired. The houses are two-story adobe. There is a Roman church,

the walls decorated with Indian paintings and some old Spanish pictures; also a Presbyterian mission, and a Government school. Perhaps because the village is invaded by so many inquisitive strangers, these Indians are somewhat difficult of approach.

Mishongovi, a Hopi pueblo on the Middle Mesa, the second on this site. In the sixteenth century there was a Roman Catholic mission here. The terraced houses are closely built, facing open streets and plazas. The population now numbers about two hundred and fifty.

Moenkopi, a farming colony of the people of Oraibi, located forty miles northwest of the pueblo. The village consists of two irregular rows of one-story houses built on the ruins of an earlier settlement.

Nambé (nam-bay′), a very small Tanoan pueblo, considerably Mexicanized, situated on the little Nambé River — a branch of the Rio Grande — sixteen miles north of Sante Fé. It is built around a plaza with a circular kiva and in 1923 had 113 inhabitants. The large dilapidated Roman church and the crumbling houses suggest a much larger settlement in former times. According to Bandelier this pueblo, like Santa Clara and Sia, owes its decline to witchcraft feuds. The annual festival is held on October 4.

Oraibi (O-ri′-bee), 'the place of the Rock,' the westernmost of the Hopi pueblos, was once the largest and most important and the only one on the original site seen by the Spanish discoverers. It has been rapidly declining in population from one thousand inhabitants in 1900 to seven hundred and fifty in 1910, and is now all but deserted, owing to factions in the pueblo itself

and to struggles with Government officials over the school question. .

About 1900, the Government began to put the Hopi children in schools at a distance against their parents' will. This divided the villagers into two factions — those willing to send their children to school and to be assisted by the Government in their farming operations, known as 'Friendlies'; and those called 'Hostiles' who were bitterly opposed to any direction by the Government.

The conservatives were defeated in the controversy, and in 1907 located themselves five miles away at Hotavila Spring. Shortly afterward the Government arrested the leaders of this faction, imprisoning some for a short period and putting others to work on the public roads (see Leo Crane). Somewhat later a group of 'Friendlies' left Oraibi and built a village at Bácabi.

Before the revolt against Spanish rule there was a Roman Catholic mission at Oraibi. The town, now almost a ruin, consists of irregular rows of terraced houses, generally three stories high and facing seven irregular streets. There are several unused kivas. Recently the younger Indians who have been to school have settled on the mesa slope below the pueblo.

The Snake Ceremonial, once given alternately at Walpi and Oraibi, is now given in the even years at Hotavila and in odd years at Walpi. The basket-plaques made by the women of Oraibi are of willow-wicker, with interesting symbolic designs of whirlwind, eagles, butterflies, and kachina personages.

Picurís (Pee-coo-rees') — the 'Acha' of Coronado's chronicles — a little Tanoan pueblo, forty miles north of Santa Fé at the foot of the Picurís Mountains, having scarcely one hundred inhabitants. Being off the main

highway, it retains its native simplicity. It was the seat of a Franciscan mission in the seventeenth century and had then several thousand population. In dress and customs these Indians resemble the Taos and they have intermarried with the Jicarilla Apaches. Although the community has 17,461 acres of land, very little of it is arable, water is very scant, and the people, however hard-working, find it difficult to make a living. The principal ceremony takes place on August 10.

Pojuáque (Po-yah'-ke) lies eighteen miles north of Santa Fé and is now a Mexican rather than an Indian village. The smallest of the Tanoan pueblos, it was abandoned by the Indians after the revolt of 1680. It is still the seat of a Roman Catholic mission.

Sandía (San-dee'-ah, watermelon), a small Tanoan pueblo on the east bank of the Rio Grande, thirteen miles north of Albuquerque. During the revolt against Spanish rule, the people fled to the Hopi country, where they remained on the Middle Mesa until 1742. They were induced by the Mission Fathers to return to the Rio Grande and the Governor gave them their present grant of lands on which they support themselves. The population in 1923 was ninety-two, and is very slowly increasing. The annual festival occurs on June 13, Saint Anthony's Day. They make no wares for sale.

San Felípe (San-fay-lee'-pay, Saint Philip, Indian name, Katishtya), a Keresan pueblo on the west bank of the Rio Grande, twelve miles above Bernalillo, New Mexico, and three miles from Algodones Station. This site is the fourth occupied since the sixteenth century. These Indians are closely related to the Cochitís and like them took an active part in the rebellion of 1680. On the long black mesa above the village may be seen the ruins

of an old Roman Catholic church and of an earlier pueblo. The present beautiful white mission church is about two hundred years old. In 1923, the population numbered 515 persons and the principal annual festival occurs on May 1.

San Ildefonso, whose Indian name signifies 'The Place Where Water Raged,' is the pueblo called 'Bove' by Oñate. It is an exceptionally interesting Tanoan settlement of 102 inhabitants (1926), now situated on the east bank of the Rio Grande, eighteen miles northwest of Santa Fé. Because of its historic interest and its nearness to Santa Fé, it is better known than other small pueblos. According to their own tradition, this is the fourth site since prehistoric times. They once lived in the cliffs and the mesas of Otowi and Sanchovi, thence they moved down to the west side of the Rio Grande opposite their present village, where the ruins of a large community may still be seen. Bandelier says that during the revolt against the Spaniards (1680 ff.) the Tehua (Tewa) of this village endured a long siege on the top of Black Mesa near by. Dr. Edgar Lee Hewett thus describes it:

> About two miles north . . . of San Ildefonso . . . lies a round-topped basaltic formation, variously known to the white people as 'Black Mesa,' 'Round Mountain,' El Huerfano (The Orphan). It would be well if it could be uniformly called by its ancient Tewa name, 'Tunyo.' . . . To the Indians . . . it is rich in legendry and folklore. From time immemorial shrines of great religious potency have been located on its top. One of these, a roundish boulder . . . is still used. . . . The top is covered with the remains of hundreds of pit dwellings . . . built when the Indians of San Ildefonso were besieged. The cliffs are scalable in four places only. . . .
>
> San Ildefonso Indians preserve traditions of this siege. Brave Indians used to descend every night through the gap and get water from the river for the besieged people to drink.

The Spaniards were afraid to come near enough to be within range of rocks and arrows. . . .

In the legendry of San Ildefonso, Tunyo was the abode of the Giant Tsaviyo, where for a very long time he dwelt with his wife and daughter. . . . Tsaviyo frequently went to the village of San Ildefonso to capture children. These were carried home to be eaten by himself and his family. He covered the distance between Tunyo and the village always in four steps. . . . In terror lest all the children of the community should be devoured, the people sought the assistance of the Twin War Gods. . . . The story of the contest between the Twin War Gods and the Giant abounds in exciting adventures. . . . The final episode occurred just east. . . . The Giant walking about on the top of Tunyo saw the Twins down there to the south practising with their bows and arrows. He covered the distance to them in four steps, but they shot him through, divided his body in halves, and buried the parts under Tunyo with the remains of his wife whom they also killed.

After the siege the remnants of the tribe reassembled at the site of the north plaza of the present village, which is now about to be abandoned for a new plaza with a rectangular kiva. The causes of the earlier migrations are not known, but the present plaza is being built because the people suffered much misfortune, from 'Sorceries' as they think. The adobe houses of the Old Plaza were originally two-story, in parallel streets, facing an unusually large plaza with cottonwood trees. The new village consists of separate one-story homes around a large plaza and spreading outward on the hillsides. In the vicinity are four sacred springs and a boulder shrine on the top of a hill to which the Cacique goes daily. The Indians object to white people approaching these sacred places.

Pottery-making, which had declined for want of incentive, has now been revived, with the encouragement given by the members of the staff of the Museum of

THE KIVA AT SAN ILDEFONSO

TAOS PUEBLO WITH TYPICAL SUMMER THUNDER-CLOUDS

Archæology at Santa Fé, and with increasing opportunities for sales. Several potters have attained distinction. (See Chapter X, 'Modern Pottery.') The wares now made are polychrome — black and red on light slip; polished red; and polished black etched in dull black, a recent and very successful invention. Geometric symbols and the characteristic bird motive are used with more decorative variation than at the other pottery-making villages. An Indian painter in water-colors, Awa-Tsireh, lives here. There is a Roman Catholic church and a Government day school.

The public ceremonies are held on January 23 and on September 6.

San Juan (San-Hwan, Saint John), a Tanoan pueblo, twenty-five miles northwest of Santa Fé and eight miles from the railroad, on the sand dunes above the Rio Grande. The Spanish conquistador, Oñate, established headquarters here in 1598, intending to found a permanent city. This was the native place of Po-pè, the celebrated medicine man who incited the revolt of 1680 against Spanish rule, with the object of obliterating everything Spanish from the life and thought of the Indians.

The houses of the pueblo are in parallel rows, terraced back from the streets; kivas are rectangular and above-ground; there is a Roman church and a mission service. The population numbers about four hundred, and is relatively prosperous. They support themselves by farming and gardening, and the women make for sale a thin, light-weight, all-black, lustrous pottery. On Saint John's Day (June 24) there are interesting foot-races and ceremonies.

Santa Ana (San-tah Ah-nah; Indian name, Tamaya), a Keresan pueblo on the north bank of the Jemez River,

a western branch of the Rio Grande, twelve miles northwest of Bernalillo. This village joined in the rebellion against Spanish rule and was conquered by De Posada in 1687, after desperate resistance. Pottery-making has been discontinued for perhaps twenty-five years, the people trading their bountiful crops for the wares of Sia and Santo Domingo.

Santa Clara (San-tah Clah-rah), whose native name K'hapoo is said to mean 'where the flowers grow near the water,' is beautifully situated on the west bank of the Rio Grande, thirty miles north of Santa Fé, and two miles south of Espanola on the railway. In 1923, it had 332 inhabitants. According to Bandelier, it was once much larger and owed its decline to 'the constant inter-killing for supposed evil practices of witchcraft' and to the pestilence which it suffered in 1782, in common with San Juan. The villagers support themselves by small farming and by the sale of the pottery for which they have long been celebrated. The type of ware is lustrous black, made by smothering red clay vessels in dense smoke and polishing them with a smooth hard stone. The exceptional square kiva is found here. The most important public ceremony is the Corn Dance held on August 12.

Santo Domingo (San-to Do-meen'-go), a Keresan pueblo, eighteen miles above Bernalillo, New Mexico, on the east bank of the Rio Grande and about two miles from Domingo Station. This tribe has been compelled to move three times in the last two hundred years on account of floods, in which two successive Roman Catholic churches were destroyed. The village has four streets lined with rather large two-story houses; a circular kiva; and a very large Spanish church. The vil-

lagers are very conservative and religious, having many ceremonies, of which the best known is the Green Corn Dance held on August 4, Saint Dominic's Day. The women make fine pottery, chiefly cream white or pinkish, with geometric decorations in black, but in limited quantities. The population, which was 819 in 1910, had increased to 959 in 1923, and is now about one thousand.

Shimopovi (Shee-mo'-po-vee) is the least known and the most isolated of all the Hopi villages; situated on the Second (Middle) Mesa, four miles west of Shipaulovi. Its two hundred inhabitants are as conservative as those of Hotavila and Old Oraibi.

Shipaulovi (Shee-paw'-lo-vee), a small Hopi village on the Second (Middle) Mesa having a high, picturesque situation and fine views over the other pueblos. Its population numbers about 125.

Sia (Tsee'-ah), a small Keresan pueblo on the north bank of the Jemez River, twenty miles northwest of Bernalillo, New Mexico, and five miles southeast of San Ysidro. Its population was originally two thousand or more, but because of its situation it became the scene of inter-tribal feuds and many were killed in the revolt against the Spanish in 1680. Stevenson said of them in 1889 that 'wars, pestilences, and oppression seem to have been their heritage; when not contending with the marauding nomad and Mexican they were suffering the effects of disease and between murder and epidemic these people have been reduced to small numbers.' By 1910, their number had declined to 119, but they are now slowly increasing. They support themselves by small farming, and when there is water enough left after the pueblo of Jemez on the river above has been served, they are tolerably well provided. They make good pot-

tery and have sometimes kept themselves from starvation by selling it. Their principal festival comes on August 15, the day of the Assumption of the Blessed Virgin. (See O. S. Halseth: 'Survey of Economic and Social Conditions of Zia.' 1923.)

Sichumovi (See-chum'-o-vee) stands between Hano and Walpi on the First Mesa, the smallest of all the Hopi villages. It was originally an offshoot from Walpi and has at present somewhat over one hundred inhabitants.

Taos Pueblo (Tah-os). This most interesting of the Upper Rio Grande pueblos, both to the traveler and the artist, lies fifty-two miles northeast of Santa Fé. Hernando de Alvarado, a captain under Coronado, was the first white man to see it. In 1540, the community, as now, consisted of two large, high house-blocks or community houses, one on the north, the other on the south side of the Taos River. This lovely stream issues from the Taos Mountains, a high range east of the town. The ancient buildings, somewhat farther east than the present ones, were destroyed in the rebellions of 1680–1696 against Spanish rule, in which the Taos took a leading part.

The communal dwellings recede terrace by terrace, from the first story to the fourth or fifth, and are surrounded by a half-ruined wall, through the loopholes of which the inhabitants once defended themselves. Two underground kivas are especially conspicuous by the high poles of their ladders extending into the air. These are used for civil, religious, and secret ritualistic assemblies, preparatory to public festivals and ceremonies, and in the intervals as a lounging-place for men. Originally there were no doorways on the ground floor of the house blocks. For protection from the enemy, these

apartments were reached by ladders and entered from the top by trapdoors. On the wide plaza, on either side of the river, stand the ovens, in shape like beehives, in which all baking is done from the heat of live coals after the wood fire has died down.

A typical apartment consists of two rooms with fireplace in the corners furnished with cooking vessels and stores of provisions, colored ears of corn, red peppers, jerked meat, bear-grass, feathers, etc., and chests of family treasures and ceremonial dresses. Around the walls are neat rolls of blankets and skins, used for seats in the daytime and spread on the cement-adobe floor as bedding at night. The stripped cottonwood logs of the ceiling extend through the walls to the outside. Although the space allotted to each family is very small, and in spite of many vessels, ladders, and articles of use, the houses are clean and orderly and the walls inside spotless with whitewash. Once a year the women plaster them on the outside with yellow mud, in preparation for important festivals.

The summer ceremonies here, as among all the pueblos, are a series of devotions for bringing rain and concerned with the planting, germination, growth, and harvesting of corn. They begin on the third of May with a foot-race from east to west in the morning (a tradition connected with their ancient sun worship) and a 'dance' in the afternoon, signifying the planting of the corn; and culminate on San Geronimo's Day, September 30, in a great religious festival which has taken on many of the elements of Catholic observances and which may be likened to a Thanksgiving Day. The picturesque ruin of the huge Roman church, built before the revolt of 1680 by peon Indian labor, still remains and is flanked by a small new church in which masses are said at infrequent intervals.

Formerly the Indians of Taos, Picurís, and Pecos went east beyond the Pecos River on buffalo hunts, and their clothing then consisted of skins. But the regular 'communal' hunting of buffalo, deer, antelope, and elk ceased long ago because of their scarcity, and only the rabbit-hunt is still practiced as a village sport. The hunting of deer and other game in the surrounding mountains by individuals still continues. Except for the ceremonial clothing inherited by each family and worn only at festivals, the older Taos wear mostly modern dress, covered with the characteristic white cotton mantle, and moccasins or buckskin boots, while the children wear the conventional dress of the American public school.

At the time of the rebellion (1680), the pueblo numbered about two thousand; at present it has perhaps six hundred inhabitants, who live chiefly by agriculture on well-watered lands, having about three thousand acres under cultivation. They make nothing for sale to the tourist. They are locally self-governing, under an elective chief and council, and have suffered less than most of the pueblos in loss of lands and from Government interference. Being reticent, self-supporting, and conservative, they object to intrusion and to being exhibited. The finer physical types earn something by posing for the sympathetic artist colony of the neighboring American town, San Fernando de Taos. (See three booklets by Blanche C. Grant, published at Taos, for details of history and customs.)

Tesuque (Tay-soo'-kay, 'cottonwood place'), the southernmost of the Tanoan pueblos, is nine miles north of Santa Fé and numbers about one hundred people. The town is quadrangular, the houses two-story and terraced. The villagers are occupied chiefly in farming by irrigation, but make, for sale on the streets of Santa

Fé, small drums, bows and arrows, rattles, war clubs, and pottery. The pottery consists largely of the so-called 'rain-gods,' little images, and animal forms. In 1925, a dam was constructed by the Government in the bed of the Rio Tesuque which raised the water table and improved the conditions of the Indian farmers. November 12, Saint James's Day, is the principal ceremonial and fiesta day.

WALPI ('The Place of the Gap'), the best-known of the Hopi pueblos, is located on the southern end of the First or East Mesa and the trails to it are very steep. There are three rows of terraced houses on one side of the rock and a precipice on the other; and a wonderful view over corn fields and peach orchards below in the midst of sandy desert, and to far horizons of eroded buttes and mesas. The present site is the latest of several known in historic times. A Spanish mission was early established on a lower terrace and destroyed in the revolt of 1680 by the Indians. Driven by the attacks of Apaches, Utes, and Navajos and for fear of retaliation on the part of the Spaniards, the Hopi moved up to their present almost inaccessible mesa.

Five rectangular kivas are built into the recesses of the rock and are entered by ladders from the top. The population at present is about two hundred. Its people have intermarried with other tribes in earlier times and are the most progressive of the Hopi villagers.

The pueblo has become widely known because here the Snake Ceremonial takes place in the odd-numbered years, and the beautiful Antelope Ceremonial in even years. The Snake Dance is held in August (see page 132) on the irregular plaza on the southeast side and near the mushroom-shaped rock monument.

In recent years schools, trading posts, and a new

settlement of younger Indians have grown up on the mesa slope below the rock.

ZUÑI (Zoon-yee'; Keresan name Sunytsi), a pueblo whose inhabitants are of mixed origin and speak the Zuñian language. The pueblo was the first to be identified by Fray Marcos of Niza in 1539 as one of the 'Seven Cities of Cibola,' and is situated forty-two miles southwest of Gallup, New Mexico, and twenty-five miles west of Ramah. The houses rise like a pyramid from the level plain on the north bank of the Zuñi River. During the seventeenth century these Indians rose several times against the Spanish-Mexican invaders and at times fled to their stronghold on Tayalone (Thunder Mountain), a high plateau where a shrine still exists. The seven villages known as the 'Seven Cities of Cibola' are now ruins, and the present Zuñi is the main village and the winter home of the tribe, there being five outlying farm settlements. In 1680 the population numbered about twenty-five hundred, declined slowly during the eighteenth century, and now numbers about 1860 and is increasing.

The Zuñis are successful farmers and stock-raisers on their communal lands. About six thousand acres of land are now under irrigation from the Government dam at Blackrock. The pottery made by the women is excellent in design and workmanship. The distinctive ware is large food bowls with animal figures and squash rosettes in black and dull red, on ivory-white ground.

The people are conservative, but most of the children are now in attendance at the Government day school, the Christian Reformed day school, or at the Reservation boarding-school, four miles away at Blackrock. Their most interesting ceremonials are the rain dances in summer and the Shalako, held in late November.

PART II

SOCIAL LIFE AND ORDER IN THE PUEBLOS

The Pueblo is something more than just an Indian. He is something more than just picturesque. He represents a unique development among the aborigines of the United States — a native-born civilization, or semi-civilization, which before the white man stumbled upon it, embodied a settled habitation with a distinctive architecture, a stable form of democratic government, a religious ritual free from human or animal sacrifices, the practise of monogamy, the equality of woman, an orderly pursuit of agriculture, well-developed arts, the love of peace. He was our first apartment-house builder, our first irrigationist, our first cotton spinner, and his wife was our first artist in ceramics.

CHARLES FRANCIS SAUNDERS

The most astonishing feature of this Pueblo development is that it is based primarily upon agriculture. The Pueblo culture is located, and apparently has evolved, in what is agriculturally the least promising part of North America south of the arctic barren lands.

The Southwest is an arid plateau, watered by scant rains and traversed by few streams. Its one favorable feature is that where water is obtainable for irrigation, the returns in vegetation are luxuriant; but irrigation, even where feasible, requires both toil and intelligence, and it seems truly extraordinary that the most varied agriculture of the Continent, north of Mexico, should have developed in so unpromising a region. It is not, however, surprising that the religion of the Pueblo agriculturalists should be found to center about the one recurrent theme of prayer for rain; to few other peoples is a dry year so terrible.

HARTLEY BURR ALEXANDER

Birth and baptism; marriage and divorce; many dances; a lifetime of endless toil and endless prayer; many harvests, rich and meager.

Then comes the time when he has planted his last crop or she has finished the last of her household labors.

Something happens to end things and to serve summons to the Judgment Seat, that lonely prominence overlooking the Oraibi-Dinnebito washes in the West. The tireless feet will no longer cover the steep trails to the pueblo on the heights; the mesa and the valley will know them no more. Death, as to us all, comes as a surprise.

LEO CRANE

CHAPTER V

DWELLINGS AND DRESS

NOTHING is more satisfying, as one travels onward toward the far mountains in the Southwest, than the way in which the village-house architecture melts into the landscape. If the dwellings are along the river, they are part of sandy dunes and almost efface themselves between irregular green fields and the rocky mesaland above. If on the mesas, as at Ácoma and Walpi, they become part of the rock formation. Just as the earliest peoples survived by using to the utmost what they found of wild game and native plants, so their housing was inevitably determined by the materials they found and by the necessity of protection from wild animals, inclement weather, and the enemies who frequently raided the harvest.

The word *pueblo*, given to the Indian villages by the Spaniards, meant a village of adjacent but separate apartments in house blocks which afforded a certain privacy and at the same time were more easily defended than single houses. It seems probable that the earliest settlements were along waterways, but, when these were attacked by wandering Apaches or Navajos, or in later historic times by the Spaniards, the people moved to high mesas, as at Walpi, and built a new cluster of apartments, suggesting the defensive castles of Europe.

Wood being scarce and loose stone abundant, the houses were made of masonry or adobe clay, and in some places developed into pyramids, as at Taos. In other localities they are built in parallel rows, terraced back on the upper story, as at Santo Domingo and San

Juan. Each upper apartment has its own veranda, so to speak, on the roof of the ground floors.

Mrs. Stevenson, in her monograph on the Zuñis, written thirty years ago, speaks of these houses as beehives, and says that the richest people lived below and the poor above. At Taos, the elders live below and move up a story when the sons marry. In building new apartments, at Zuñi the men lay foundations, build walls, place logs and make roofs of brush and earth, while the women then and afterward do the outside and inside plastering. As the housewife lays on the plaster, she sprays water from her mouth — after the manner of the Chinese laundryman — to keep it moist.

Here and there in the fields below the mesas there are temporary shelters for use in summer, built of four corner posts covered with a brush-and-pole roof, which afford shade from the sun for the watchers against crows and burros, and, on occasion, storage for tools and crops.

However the permanent houses may have been constructed in prehistoric times, they have been built since the sixteenth century mostly of adobe — clay mixed with straw and water, moulded in large-sized bricks, and dried in the sun. The 'dobes are laid in adobe mortar and must be protected from rain by roofs and plaster. Before the first germination ceremonials in the spring, one of the picturesque sights is the housewife outside on a ladder, plastering the walls freshly with golden brown mud spread smooth by deft brown hands.

These native materials — adobe clay, rubble, and loose flat stone — are used in different combinations according to the convenience of the builder: Ácoma village, situated on a high and almost inaccessible rock, is built largely of rubble and clay with stone corners; Zuñi town, of adobe with stone cornices; the Hopi houses of stone roughly dressed.

Each apartment has a fireplace in the corner of the principal rooms, with a chimney pot made of old jars from which the bottom has been broken out. Ceilings are made in prehistoric style with cedar beams, cross-poles, and brush, over which clay is laid and tamped down. The floors are of flat stones or clay, beaten hard and smooth. In Spanish days the few windows were glazed with mica, but these have now been replaced with American glass. There were no first-floor doors then; only ladders to the roof from which the householders descended through a trapdoor to the apartment. But in modern times doorways have been cut in the ground story, although they are often used only for storage purposes, as we should use an attic or a granary. Every dwelling is whitewashed on the inside with burned gypsum and none is complete without a *metate*, or milling-box, a three-compartment stone utensil on which the housewife grinds maize, seeds, and other foods with a mealing-stone or *mano*. The surfaces of the grinding-stones are graded from coarse to fine and the corn is passed from one to the other to be made into fine flour.

The process of grinding is extremely laborious — the woman on her knees, leaning forward and exerting her strength, and is substantially the same as when the Spaniards came, for Casteñeda says:

> They keep the separate houses where they prepare the food for eating and where they grind the meal, very clean. This is a separate room, where they have a trough with three stones fixed in stiff clay. Three women go in there, each having a stone, with which one of them breaks the corn, the next grinds it, and the third grinds it again. They take off their shoes, do up their hair, shake their clothes, and cover their heads before they enter the door. A man sits at the door playing on a fife while they grind, moving the stones to the music and singing together.

The Hopi word *kiva* signifies an assembly-room, and in every pueblo there are two or more kivas, depending on the number of the ceremonial and religious organizations which need such a community chamber. These are similar to those of prehistoric times and may be either circular or rectangular, built under the ground, or to some height, as in the case of the very striking kiva at San Ildefonso, or included in the general structure of the village. They may be identified by the two long poles of the entrance ladder projecting from the hatchway entrance on the top. The Spaniards evidently did not understand the uses of these buildings, for they called them *estufas* — that is, stoves or hot places — perhaps because they were sometimes used by the men for steam baths. They are, in fact, the ceremonial rooms of the men where the secret religious rites, preceding the public ones, take place. In the intervals of ceremonials they serve as assembly-rooms, as workshops where cotton is spun or prayer sticks made for ceremonial purposes, and as a sort of men's clubroom.

The furniture is meager: a stone bench around the walls, a small fireplace under the top-door, a platform at one end, and, in some of them, a closet in the wall which is symbolic of the legendary Si-pa-pu, or entrance to the lower world from which the prehistoric peoples are supposed to have emerged. When not in use, this hole is closed, and behind it there may be a shrine and sacred articles. It is a serious offense for strangers to attempt to enter any kiva, though a few scientists and men in especial favor, who have been adopted into the tribe, have been permitted to see them.

The ceremonial dress of to-day among the pueblos is, for the most part, what is left of the costume described by the Spanish explorers in the early sixteenth century. It was habitually worn until contact with the whites in

the nineteenth century greatly modified the materials and, to some extent, the patterns of Indian garments. The old-time hand-woven cotton mantle and kilt and the later woolen blanket made by the Navajos are seldom worn except on ceremonial occasions. Among most of the pueblos a four-handkerchief mantle of calico or silk, manufactured for the Indian trade, is worn by women over a calico dress; and a cotton shirt and trousers by the men. Canvas is gradually replacing buckskin as deer become scarce; the twisted rabbit-skin robe and the netted turkey-feather robe are scarcely seen at all outside of museums. In recent years, a light-weight, machine-made blanket, the design of which is a modification of Indian symbols, has taken the place of the native blanket for which the Pueblos used to barter with the Navajos.

The dress of the northeast pueblos, Taos and Picurís, resembles in some respects that of the Plains Indians with whom they have traded for centuries. Their original, now their ceremonial dress, consists of fringed buckskin shirts, robes of buffalo skin painted with ceremonial designs, leggins of deerskin or of bright-colored flannel, and a long sash of the same material. An occasional Taos woman wears still the long fringed buckskin shirt characteristic of the Plainswomen. And the hair of both men and women is often wound with fur or flannel, now as then.

At other pueblos the common garment of men, once the apron or kilt, is now replaced by a narrow breechcloth skirt or by white cotton trousers open below the knee on the outside seam, with a cotton shirt worn outside and belted with cotton.

The typical dress of Hopi women is sleeveless, made of two blankets, black with dark blue border at top and bottom, fitted so as to hang from the right shoulder and

pass under the left arm, and extending to just below the knees. Among other Pueblos the ceremonial dress is usually of the same two blankets, but they are woven with bright red designs at top and bottom in Navajo style. A belt of wool, striped in red and green, is wrapped three times around the waist. A white cotton petticoat hangs slightly below the outer blanket dress and a white undergarment and footless stockings are necessary to complete the outfit. Hard-soled moccasins of white buckskin, with a long strip wound round the leg from ankle to knee, give a graceful appearance of top boots. Over her blanket dress the Hopi dancer wears a shoulder blanket of hand-woven cotton on which bright red, blue, or green borders have been embroidered in wool. But these are becoming rare and the silk mantle of Spanish origin is gradually replacing them.

The modern dress of older Indian women is still distinctive, though unlike the original ceremonial costume. It consists of a very full calico skirt, often as much as twelve yards around, similar to the Victorian skirts worn in the middle of the nineteenth century by white women. The skirt has a band of white braid at the top of its hem or flounce and reaches to the ground. Over it is worn a blouse of calico and over the shoulders a handkerchief manta of silk or cotton. It seems probable that this costume was adopted under the tutelage of the Spanish Church authorities, and possibly in imitation of the flowing garments of the Sisters of the mission schools. Young Indian women who have attended Government and Protestant mission schools generally wear the typical uniform of American schoolgirls.

The dressing of the hair varies in different pueblos somewhat and is significant of age, sex, and marital condition. Washing the hair with yucca suds is a necessary preliminary for taking part in any ceremonial. At Taos

and Picurís, the hair of both sexes is parted and braided in two strands in front. Among the other pueblos, the hair is cut level with the brows across the forehead, the side strands cut square below the ears, and the long hair at the back is gathered tightly into two knobs — at Zuñi, into one knob — and tied with white or colored yarn. Neither men nor women dress their own hair; women comb the men's hair and one another's, though sometimes a lover or a bridegroom undertakes the part of hairdresser for his beloved. At Zuñi, in dancing, in grinding corn, and in all ceremonies, bangs fall to the lower lip and hang over the face, because 'it is not well for a woman's face to be exposed to the gaze of men.'

An old-time Hopi custom dictates that the outer garments of the bride shall be prepared by the male relatives on both sides of the family. Her menfolk prepare the cotton yarn and the bridegroom's father and men friends weave the two white blankets and the white fringed girdle and provide a pair of moccasins. The Hopi and the Zuñi maidens wear their hair in whorls over each ear; and the Hopi girls, when ready to receive suitors, put a yellow squash blossom over the ear. After marriage the hair is worn in two tight rolls tied with hair or cotton string. The bride's ornaments are heirlooms, necklaces of many strings of thin hand-made shell beads, interspersed with irregular-shaped bits of rose-colored seashell and with bits of turquoise. She may wear earrings of turquoise or wood and turquoise mosaic, and bracelets of the open Navajo type.

The last act of the wedding ceremony among the Hopi is the bride's 'going home' after four days spent with her husband's people. 'Wearing the large white blanket picturesquely disposed over her head and carrying the smaller blanket wrapped in a reed mat in her hands, she walks to her mother's house. . . . In this land of wo-

men's rights, the husband must live with his wife's relatives. . . . The moccasins are soon worn out, and thereafter the woman goes barefoot like the rest of her sisters. The sash and blankets are rolled in the mat and hung from a roof-beam in a back room. Perhaps the larger blanket is embroidered, when it becomes a ceremonial blanket, or it may be pressed into use for carrying corn and watermelons from the fields. The smaller blanket is kept as one of her most sacred possessions; the young mother puts it on only at the name-giving ceremony of her first born, and often it enshrouds her for the last rites. At the farewell ceremony of the kachinas in early summer all the brides of the year dress in their white robes.'

CHAPTER VI

FIELDS, FOOD, AND STOCK

Story and picture have long made us familiar with the nomad tribes of the Great Plains and the High Plateau, so that we think of Indians as constantly roving rather than as settled in villages. But it must be recalled that all the natives east of the Plains, and from Florida to Massachusetts, were living in settled communities and cultivating the soil to some extent when the Spaniards came to the Rio Grande in the sixteenth century, and the English to the Atlantic Coast in the seventeenth century. Even then, the Pueblos of the Southwest depended more on agricultural produce than upon game for their food supply.

Maize, introduced from Old Mexico in prehistoric times, had long before become the chief food plant of all the tribes in North America. Everywhere in the ruins of the Southwest are found charred cobs and the earliest explorers invariably mention its widespread cultivation. A folktale relates how the prehistoric Kisani brought with them from the lower world an ear of corn for seed. The Pueblos wanted some of it, and finally the Kisani agreed to break the ear in the middle and let them have either end. While the Pueblos were trying to decide which end to take, the mischievous coyote ran away with the tip end, leaving the butt to the Pueblos, which is the reason, so they say, why their corn is better than that of other tribes.

In historic times the colonists learned to use it not only as food but as a medium of exchange for taxes, rents, and debts. So many braids of corn of fifty ears each paid for a horse or a buffalo skin, and the presenta-

tion of corn was and is still, among the Indians of the Southwest, a sign of friendship.

The Indians developed two kinds of corn, flint and flour; flint for making hominy and the softer varieties for bread flours. Indian varieties are of many colors. The flint corn comes in white, yellow, and pink; the flour corns in six colors and their variations: red-streaked, pink, white, red, blue, spotted, yellow, salmon, dark blue, and white kernels tipped with black. The braids of variegated ears of corn hanging to dry, along with red chili peppers, on the tops of walls of houses, give color and charm to the yellow-brown landscape.

Wherever water was abundant, as at Taos and along the Rio Grande, the tribes practiced irrigation. When driven back to the high mesas and the semi-arid lands, as in the case of the Hopis and the Ácomas, they taught themselves to raise surprisingly large crops by unique methods. And they are still able to do this under conditions and on soils that appear to be wholly unfavorable. Where water was very limited, their success depended upon the careful choice of little patches of ground — the least unfavorable — and upon deep planting and intensive cultivation. Centuries of seed selection have resulted in producing hardy, deep-rooted varieties of corn which will germinate with little moisture and mature quickly.

Indian farmers are frequently criticized for not adopting the modern methods of their white neighbors. It should be remembered that many of the agricultural tribes have been driven, by nomad raids or by reallotment of their lands, to less and less fertile areas and have been deprived of adequate water supply. The type of farming which Government farmers and agents have urged upon them has too often been wholly unsuitable to semi-arid conditions. The villagers have had

reason to laugh at the unsuccessful attempts of demonstrators to raise prairie corn by deep plowing with tools and implements suitable only to large fields of level or rolling ground.

The Indian must plant in sandy washes where seepage after a brief rainy season may bring the crop to maturity. His seed corn, of prehistoric origin and many colors, can be grown with a minimum of water and in a very short season. Just before the rainy season is due, the native farmer digs holes eight to twelve inches deep, and buries ten to twenty grains of seed therein in hills about ten feet apart. He waters each cluster by hand like a garden plant, and by the time the summer thunderstorms come on, it has grown to the surface and is about to tassel out. When it rains, the Indian rushes out and diverts the brief flood into the corn holes. Meanwhile he must diligently protect it from the desert winds by a sagebrush windbreak and by packing it about with sand, and from the rapacious crows and wandering live stock. The short cornstalks, whipped to pieces in the wind, are not of much value as fodder, but are nevertheless saved, as all forage must be by the farmer, to feed his animals.

In earlier times the Indian farmer used a sharpened digging-stick about three feet long with a stilt-like projection at one side; and other implements, made of the shoulder blades of the buffalo, or antelope and deer antlers, and of tortoise shell, but he has now adopted hoe and spade and other modern tools. Wherever the soil permits and water is sufficient, he is gradually adopting modern methods and using improved seed. According to C. E. E. Lindquist, by means of dry farming and limited irrigation in 1923, nine hundred Hopi Indians were cultivating four thousand acres of land, growing small grains and vegetables.

In quite recent times the Pueblos have added stock-raising to their occupations. Wherever there is pasture, as below Ácomá Rock and on the semi-arid lands on which intensive farming is impracticable, they are now raising scrub ponies, sheep and goats, and some beef cattle. This gives variety to their diet and adds wool and hides with which to barter at the trading-posts.

The food of the Plains Indians was chiefly buffalo meat; of the North Pacific tribes, fish; and of the tribes on the high desert plateau, wild vegetables, small game, and insects. The natives of the Southwest alone lived, even in prehistoric times, as much by agriculture as by hunting and seem to have bartered their vegetables and cotton for the game and hides of the surrounding peoples. When the Spaniards came, turkeys had long been domesticated and herded like sheep, but, oddly enough, not for their flesh, but for their feathers, which were used in ceremonials; and eagles are still kept in Hopi villages for their plumes. Besides maize the Pueblos raise beans, melons, squashes, and sunflowers for their edible seeds; the Hopis, Navajos, and Zuñis have many peach trees and have added to their food resources wheat, barley, and many vegetables, including chili and onions. Deer, bear, antelope, mountain lion are occasionally hunted in the far ranges, but rabbits are the only game of much abundance. Among wild plants they still make use of plums and cherries, the piñon nut, the mesquite bean and the cactus pear.

As soon as the ears of green corn are fit for roasting, they are buried in holes in the ground which have been heated with live coals and covered up for some hours. The teeth of old people are worn almost to the gums with chewing gritty corn and other hard food. And the habit of allowing young children to eat green or half-roasted corn, and the lack of all except mother's milk,

have caused a high death rate among babies. The Hopis keep a year's crop in storage against possible famine, and in every house after harvest one may see strings of braided corn hung from the ceiling along with chili peppers, strips of dried squash and dried meat ('jerky').

The Indians prefer cooked food and in their native state had a varied and wholesome diet. The women are inventive cooks, employing all the methods of broiling and roasting, boiling by means of hot stones, and fireless cooking of seed and corn meal mush in hot holes. Mexican stone and clay ovens, shaped like beehives, are now used by all the Pueblos except the Hopis.

The preparation of ripe corn for the many kinds of dishes they make requires a vast amount of hard labor and a variety of skilled hand processes. What is left over from ears of corn roasted in pit ovens is dried for future use and ground, raw or parched, for making breads and mushes. Cakes of many kinds are mixed with goat's meat, or mutton or jerky and vegetables, and even straw; tortillas, pones, and, most common of all, piki or wafer bread, vary the diet. This paper-thin bread is made of bluish-violet corn batter to which a little wood-ash lye is added, and baked on a polished and heated stone which has been rubbed first with pounded squash or watermelon seed, and afterward with melted piñon gum. The batter, spread as thinly as possible, is deftly turned by hand and bakes quickly. It is then rolled in long cylinders which keep a long time and which are habitually used in place of spoons to eat meat stew or mush.

Hominy was long ago invented by Indian women: when the skin of the kernel has been removed by soaking in wood-ash lye, the corn is boiled and often dried and ground, making a nourishing food of small bulk. Pinole meal, made of corn or of maize and mesquite

bean pods parched and ground together, is carried on long journeys, and samp and succotash are in the list of more than fifty kinds of corn dishes.

Corn was not simply food to an Indian — it was bound up by symbolism with his thoughts of fertility and beneficence. Dr. Fewkes has said:

> The culture of the Hopi Indian is founded on the food supply, maize, a cereal that America gave to the world. . . . The Hopi myths and rituals recognize the dependence of their culture on this plant. They designate corn as their Mother; the baby, when twenty days old, is dedicated to the Sun and has an ear of corn tied to its breast. A boy initiated into the tribe has an ear of corn for his Mother. . . . The symbol of chieftainship of a religious fraternity is an ear of corn with appropriate wrapping which is said to have belonged to the Society when it emerged from the Underworld.

In early times salt was essential to the western Pueblo, not merely for physical comfort, but also for its ceremonial uses. The salt deposit forty-two miles southeast of Zuñi was a supply not only for the Hopis but for the southern Navajos as well. The salt lake was a sacred place which no Zuñi visited except by permission of those in authority. War parties, appointed as salt gatherers, after elaborate ceremonies of preparation and prayers for a safe return, went on their arduous desert journey in July to bring home the annual supply. Salt was so essential that the place where it might be obtained was neutral ground, a refuge from enemies. There are salt deities and myths concerning them, among the Pueblos and the Navajos.

CHAPTER VII

FAMILY, CLAN, AND CUSTOM

A PUEBLO community on a summer morning has an air of abandonment — of still, sunny remoteness. A few children playing quietly by river or spring, a barefooted woman looking after her baking in the plaza oven, or tending her pots in process of firing in the dung-kiln, or fetching wood and water, seem like figures in some artist's dream. No men about, except an ancient who makes drums to sell, or a young guardian policeman acting as interpreter between the traveler and the villagers.

Through the open doorways may be dimly seen tidy, whitewashed interiors, the ceilings hung with family belongings, furnished with fireplaces and metates and with bedrolls along the walls. Women will be sitting inside on mats, their faces shyly screened with loose black hair as they work at moulding pottery, weaving baskets; or, more likely, kneeling at the metates, grinding and regrinding the corn — a task in the Indian household which is never done.

Outside the community houses and along the ditches or the stream, men and boys will be working on the common farming lands, while nearly all the children of school age will be attending the Government school near by or some boarding-school far away.

All this makes a charming picture of serenity and industry, but it is, in truth, incomprehensible and misleading to the ordinary observer without some knowledge of the principles of communal living and the social and religious practices by which these people rule their

lives. Neither the household nor the village can be understood in terms of modern society because it was built up on quite other premises. The Indian has always seen the earth and the sky, animals and plants, as part of his own order. He thinks of himself as tied to them by invisible and controlling cords, and of his family and his clan and his tribe as an intimate part of the universe and its laws.

The pueblo is a sphere of being, complete in itself, needing no super-control of State or Nation. Inside of it the individual can neither live nor die to himself. As a single person he is of small consequence. Only as a member of his clan family can he fulfill the destiny to which he is foreordained by the rules of his ancestors, and by the regulations of the tribe defining the limits of his social obligations.

In prehistoric times each family was part of a clan and each clan traced its origin to a single maternal ancestor. In more modern times descent is traced in some tribes to a paternal ancestor, but in either case, the child is bound to the clan from birth and is regarded as spiritually linked with Those Above, with the 'Totem' or natural object from which his clan takes its name. And he is, finally, of a tribe composed of clans, all tied together by traditional relationships and ritualistic observances.

A pueblo tribe is, therefore, a self-sufficient group, socially and politically. The oneness of the community is expressed in communal holding of lands. In the typical old-time pueblo each head of a family was granted the use of his land by the community council and kept it for life or till some redistribution became necessary as new households were set up. The kivas and clan assembly-rooms and the ceremonial objects have always been community property. The family apartment of

two or three rooms is held for life and passes on from one member of the clan to another until the clan dies out. In many modern pueblos only remnants of certain clans remain and some apartments may be standing empty.

The clan to which each family belongs was named long ago for some object in nature — badger, bear, cottonwood, water, and so on — and is composed of those traditionally descended from a common maternal or paternal ancestor. Among the pueblos it is generally, though not universally, a maternal ancestor, and this fact conditions all family and pueblo arrangements, in spite of diversities of language and tribal separateness. Among the Hopi the clan distinction, intermediate between family and tribe, is very important; while the easternmost pueblos lay much less stress upon it.

At some eastern pueblos it does not matter whether the bridegroom goes to his wife's house or she to his, but it is expected that he will ultimately provide a house. At Jemez three fourths of the houses are owned by men, and this custom, Dr. Parsons points out, tends to break up the traditional compound family. But the compound family, of three generations living together, nevertheless exists even at Jemez.

But everywhere clan descent and the proprietorship of the family home go together. Thus, wherever the descent is traced from a maternal ancestor, the wife owns the home, as a trustee, so to speak. And where, as in some eastern villages, descent is in the paternal line, the man is proprietor of the family apartment. Among the western villages the women own the houses and the flocks and have at least an equal ownership of the crops and the standing harvest. The men control the kivas, own the horses and cattle and have an equal ownership in the crops until they are stored in the house-granary.

But Leo Crane goes so far as to say that then a man's horses may starve for grain unless his wife is generous.

Division of labor between men and women is determined here, even more than elsewhere in the world, by economic necessity and convenience. All — men, women, and children — must work in order to live at all in so meager a region. Women prepare the food, grind the corn, gather seeds, herbs, and greens, look after the storage of harvest and materials, carry water from spring or river, keep the garden of chili peppers, gourds, and vegetables; gather clays for pottery-making or willow and devil's-claw (*martynia*) for baskets; care for the children and the sheep, the goats and the chickens.

The Indian housewife is incessantly busy while carrying, bearing, and rearing her children. Even in her age she must justify her existence and on the steep trails of Ácoma old women toil upward with bundles of fagots on their backs, or herd the sheep and tend the children. The waking and working day is from daylight to dark. At dawn the housekeepers of the mesas carry ollas of water — one on the back, one on the head — enough for the household's needs, up the rocky trails from the spring to the summit. At noon they are baking bread in the plaza ovens, or firing pottery or grinding corn on the metates. It is not surprising that they do not sing and take small share in public fiestas.

In spring-time the woman has her house-cleaning to do. On a ladder she will be plastering her house outside with yellow adobe mud, smoothing it off with a small brown hand; or inside, washing the walls of her two-room apartment with white gypsum. According to her knowledge she is clean, but the scarcity of water in many places, the distance it must be carried, and ignorance of hygiene limit her efforts to practicable personal and household cleanliness. Outside sanitary

conditions are much the same as everywhere else before the invention of household plumbing. The village streets are swept at intervals and all rubbish has for centuries been thrown over the edge of the mesa in the rear of the house walls, forming a slope which, because of the dry air and the very small amount of garbage it contains, quickly becomes inoffensive.

The man's part is to cultivate the land, irrigate the crops and protect them from animals and windstorms, and bring in the harvest; to care for the burros, the cattle and horses, and for the eagles and snakes kept for ceremonial purposes. In company with other men in the kivas, he must make ceremonial dresses, prayer sticks and ornaments; weave the bride's wedding blankets and make his wife's moccasins of fine buckskin. Hopi men also weave women's wool dresses and sashes for sale to other pueblos, and at the present day often use an American sewing machine for making cotton garments. Some men knit the footless stockings and a few are silversmiths.

Since there will be at least two ceremonials a month throughout the year, the menfolk are constantly arranging the dance-groups, drilling the actors or bringing off the ceremony. The sphere of men prescribes that they shall do all public work, and in everything relating to religion, traditional education, and tribal control, women have small direct part except in the public portion of the ceremonies.

Incidentally the men help raise the timbers of a new house which any woman may be building, gather fuel if it must be brought a long way, and often help with the children. Wherever there is game to be hunted, men organize the deer or rabbit hunts and bring home meat for the household.

Pueblo children are seemingly much desired and be-

loved by their parents. They are seldom punished and, it is said, never whipped except in the adolescent initiation ceremony. They are well-behaved, respectful to their elders and shy with strangers, unless contact with tourists has taught them to beg for dimes and candy. Whether by nature or training, they are less boisterous than white children. The girls always speak softly, and to strangers will scarcely speak at all. The contrast between the school-bred and the home-keeping Indian child is shown, not only in the difference of clothing, but in the confident manner in which the school children speak for themselves.

Always among primitive peoples babies and small children are cared for by old people and little girls. Until put in school, the pueblo children play along the ditches or in the plaza or go with their guardians to work. Their home education is more systematic and more thorough than the casual observer may suppose: for the child, from the moment he can walk and speak, goes everywhere with his elders and tries to do whatever they do. Children learn very early to use their hands skillfully, to help in the planting and in the harvest, to carry wood and water and help with the house-building according to their strength; to watch the cornfield, to gather basketry materials and seeds and plants for food as they trail over the byways with mother. They learn the beginnings of pottery by moulding mud figurines and to weave by making crude little baskets of their own. For amusement the boys chase rabbits, shoot at targets, or play at war with bow and arrow.

Indian dolls are of painted wood and feathers made in the image of the kachinas, and at nightfall the children are gathered in to hear the legends of these mythological personages. This is often referred to as 'Grandfather's education,' and through it industry and obedi-

ence are constantly inculcated. Nowadays a majority of the children between ten and sixteen years of age attend either a Government or a mission school near home or some boarding-school at a distance, where book learning largely takes the place of Indian training. Thus two very different kinds of education supplement or oppose each other in the minds of the children and tend to separate them from their parents and break down the tribal unity of ideas.

By the time they reach the age of maturity, they should, according to the Indian code of living, be initiated into one of the societies which have to do with war ceremonies, or with healing and rain-bringing. And sometime between the ages of fourteen and eighteen marriage is discussed and arranged for every young person. No woman of child-bearing age is unmarried and only rarely does a man remain a bachelor. The Pueblos are monogamous, though permitting divorce on easy terms, and, strictly speaking, no one may marry into his own clan nor outside his own tribe if it can be avoided.

With these limitations the young people begin a courtship, and when the girl is ready to approach the youth she and her mother make the formal advances, as described by Dr. Parsons at the pueblo of Jemez:

> Marriage choice is not accounted a matter merely for individuals concerned to determine. The Hopi-Isleta-Taos-Tewa (and Spanish) practice of family council prevails. 'When a man wants to get married, the relations will come.' If they agree, 'then they ask the girl's family,' who have in their turn a meeting. 'If they don't like the boy, they send word back.' Consulted in particular, . . . by the boy's family are his father's kinswomen. . . . The marriage agreed to, the boy gives things to the girl, a dress, a belt and moccasins, the usual wedding gifts. And the girl goes to grind corn at the house of the boy's mother, sometimes before the marriage, sometimes afterwards.

After the early morning church wedding, wedding breakfasts follow. One is served at the bride's house, one at the groom's, one at the house of the wedding sponsors, the guests going from house to house, the groom's people going to the houses of the bride and sponsors and the bride's people to the houses of the groom's people and sponsors.

At Jemez the church ceremony is requisite in native as well as Catholic opinion, for marriage, and the Church will not perform the ceremony a second time for any but the widowed. But one case of separation and remating has occurred in several years, . . . and the couple eloped to a place where they would not be disapproved of, to Zuñi.

According to Dr. Walter Hough, the Hopi young people carry on their own courtships and, when the girl is seen combing the youth's hair, it is a public sign of betrothal. He describes in detail the extended ceremonies of a wedding at Oraibi:

When the young people decide to be married, the girl informs her mother, who takes her daughter, bearing a tray of meal made from white corn, to the house of the bridegroom where she is received by his mother with thanks. During the day the girl must labor at the mealing stones, grinding white meal, silent and unnoticed; the next day she must continue her task. . . . On the third day of this laborious trial she grinds the dark blue corn which the Hopi call black, no doubt glad when the evening brings a group of friends, laden with trays of meal of their own grinding, as presents, and according to custom, these presents are returned in kind, the trays being sent back next day heavy with choice ears of corn.

After this three days' probation . . . comes the wedding. Upon that day the mother cuts the bride's front hair at the level of her chin and dresses the longer locks in two coils, which she must always wear in token that she is no longer a maiden. At the dawn of the fourth day, the relatives of both families assemble, each one bringing a small quantity of water in a vessel. The two mothers pound up roots of the yucca, used as soap, and prepare two bowls of foaming suds. The young man kneels before the bowl prepared by his future mother-in-law and the bride before the bowl of the young

man's mother, and their heads are thoroughly washed and the relatives take part by pouring handfuls of suds over the bowed heads of the couple. While this ceremonial . . . goes on . . . a great deal of jollity ensues. When the headwashing is over the visitors rinse the hair of the couple with the water they have brought, and return home. Then the bridal couple take each a pinch of cornmeal and leaving the house go silently to the eastern side of the mesa on which the pueblo of Oraibi stands. Holding the meal to their lips, they cast the meal toward the dawn, breathing a prayer for a long and prosperous life, and return to the house husband and wife.

The ceremony over, the mother of the bride builds a fire under the baking stone, while the daughter prepares the batter and begins to bake a large quantity of paper bread. . . . The wedding breakfast follows closely on the heels of the wedding ceremony and the father of the young man must run through the pueblo with a bag of cotton, handfuls of which he gives to the relatives and friends, who pick out the seeds and return the cotton to him. This cotton is for the wedding blankets and sash which are to be the trousseau of the bride. . . .

A few days later the crier announces the time for the spinning of the cotton for the bride's blankets. This takes place in the kivas, where usually all the weaving is done by the men and with jollity and many a story the task is soon finished. The spun cotton is handed over to the bridegroom as a contribution from the village, to be paid for, like everything else Hopi, by a sumptuous feast, which has been prepared by the women for the spinners. Perhaps ten sage-brush-fed sheep and goats, tough beyond reason, are being softened in a stew, consisting mainly of corn; stacks of paper bread have been baked, various other dishes have been concocted, and all is ready when the crier calls in the hungry multitude. . . .

With the spun cotton, serious work begins for the bridegroom and his male relatives, lasting several weeks. A large white blanket . . . and a smaller one must be woven and a reed mat in which the blankets are to be rolled. A white sash with long fringe and a pair of moccasins each having half a deerskin for leggings, like those worn by the women of the Rio Grande pueblos, complete the costume. The blankets must have elaborate tassels at the four corners.

Shortly before sunrise, the bride, arrayed in her finery, performs the last act in the drama, called 'going home.' Up to this time the bride has remained in the house of her husband's people. Wearing the large white blanket picturesquely disposed over her head and carrying the small blanket wrapped in the reed mat in her hands, she walks to her mother's house . . . and the long ceremony is over . . . for in this land of women's rights the husband must live with his wife's relatives.

The corn-grinding, which is so conspicuous a part of the bride's probation in her mother-in-law's house, is very exhausting, and, if she continues to grind all the meal required for her mother's household of which she and her husband become a part, her health may be seriously affected. Leo Crane declares that she has ground in the first year of her married life from one thousand to two thousand pounds of corn in payment for her man and her wedding dress, and attributes to this overexertion the fact that at one time there was no woman at the First Mesa whose first born was living.

As in most primitive societies, the Hopi woman works up to the very day when her child is to be born, and in normal cases has only a little help from a midwife during childbirth. A curtain is hung before her door and she remains in retirement for nineteen days. Dr. Goddard describes briefly the formalities which must be observed during this period of purification.

The Hopi baby is first washed and dressed by its paternal grandmother or by one of her sisters. On the day of its birth she makes four marks with cornmeal on the four walls of the room. She erases one of these on the fifth, tenth, fifteenth and twentieth day of the child's life. On each of these days the baby and its mother have their heads washed with yucca suds. On the twentieth day, which marks the end of the lying-in period, the grandmother comes early, bathes the baby and puts some cornmeal to its lips. She utters a prayer in which

she requests that the child shall reach old age and in this prayer gives it a name. A few of the women members of the father's clan come in one at a time, bathe the baby, and give it additional names. After the names have been given, the paternal grandmother goes with the mother and the child to the eastern edge of the mesa, starting so as to arrive about sunrise. Two ears of white corn which have been lying near the child during the twenty days are carried with them. The grandmother touches these ears of corn to the baby's breast and waves them to the east. She also strews cornmeal toward the sun, placing a little on the child's mouth. As she does this, she prays, uttering in the course of her prayer the various names which have been given to the child. The mother goes through a similar ceremony and utters a similar prayer.

The names given relate in some way to the clan of the one who bestows them. Of the various names given to the child, one, because it strikes the fancy of the family, generally sticks . . . until the individual is initiated into some ceremony. . . . At that time a new name is given.

Esther Goldfrank, in a recent and intensive study of the customs prevailing at the eastern pueblo of Cochití, thus describes the etiquette attending childbirth:

When a woman is pregnant she keeps a perfect ear of blue corn in the house. . . . After the baby is born she keeps a stirring stick, the ear of corn and a light beside the baby until it is named, to ward off the evil spirits. . . . The father may be present at the birth of the child and some female, either the woman's mother or aunt, will also be near at hand. The . . . Shaman is usually called when the child is about to be born. He sees whether the baby is in the right position and if not, tries to turn it by manipulation. He also massages the woman to assist and hasten delivery.

When the woman feels her first labor pains, she takes off her shoes, stockings, belt and jewelry. She unfastens her hair, so that the child will descend more rapidly . . . the afterbirth is taken down to the river. . . .

The baby is bathed in warm water, his head is washed and he is rubbed all over with oil. The lying-in period is four days. During this time a perfect ear of corn is kept beside the child

and a small fire made from twigs is kept burning. This may be used at any time to keep off the evil spirits.

Since the age of marriage is so early, it might be expected that pueblo families would be large and the population increase rapidly. But certain unfavorable conditions keep the population at a standstill. Although babies are nursed as long as possible, they are often fed piki bread and green corn very early, and it is generally estimated that at least half of those born die of intestinal troubles. There is also some basis for the belief that the child-bearing period of Indian women ceases earlier than among white women. And unquestionably the periods of semi-starvation through which many villages occasionally pass would tend to curtail the birth rate as well as increase the death rate.[1]

The ancient clan and family customs of which this is a very scant outline, though still practiced in many pueblos, are being rapidly undermined by the education of the young Indians in mission and Government schools. At Sia for instance:

> The boys can and now often do bring a bride home as soon as both have graduated from school. He then builds a house, if the parents do not abandon theirs, and build anew. . . . The women thus brought into the pueblo all testify to the love and kindness of their new parents, even those of different tribes, who do not speak the same language. In one case where the bride is a Tewa girl she and her husband converse in English, while with their parents she speaks Spanish. The young people as a rule have their home next to the parents, so that families are grouped together.[2]

Divorce is relatively uncommon, though it requires no formality. Wherever the wife owns the home, as

[1] Hough, after J. G. Owens, *Journal of American Ethnology and Archæology*, vol. II. 1892.

[2] Halseth, 1923; Grant: *Taos Indians*. 1925.

among the Hopis, and has ground corn for her husband, she has the right to divorce him. When the husband finds his belongings set outside the door, he must return to his own people or leave the pueblo. But among the eastern pueblos long in contact with Catholic Christianity, divorce is not tolerated.

No matter how old, the pueblo dweller never ceases to labor. In a society where the individual is of so little importance and where the family unit must save itself by incessant industry, every person must work as he can, and when no longer able dies tottering along the trail. In general the old are respected and kindly enough treated, but since the economic conditions of their community are always hard, they do not expect to be softly cared for, but to contribute their utmost to the end. It may be the aged are no more unhappy among Indians than in societies where ease and idleness afford slight compensation for the sense of being a burden.

The Hopis believe that the 'breath-body' must return to the Underworld whence all spirits originally came; and when an adult dies, the body must be prepared for this journey. Dr. Goddard thus describes the usual procedure:

> When an adult dies, the nearest relatives by blood wash the head, tie a feather offering to the hair so that it will hang over the forehead, wrap the body in a good robe, and carry it to one of the graveyards which are in the valleys near the mesas. The body is buried in a sitting position so that it faces east. This is done within a few hours after death has occurred. The third night, a bowl containing some food, a prayer stick offering, and a feather and string, are carried to the grave. The string is placed so that it points from the grave to the west. The next morning, the fourth, the soul is supposed to rise from the grave, and proceed in the direction indicated by the string where it enters the 'skeleton house.' This is believed to be situated somewhere near the Canyon of the Colorado.

The bodies of children who have not yet been initiated into some society are not buried in the ground, but in a crevice of rock somewhere near by and covered with stones, the string pointing to the home of the family. The spirit of the child is believed to return and to be reborn, or to linger about till the mother dies and then to go with her to the Underworld. If the adult spirit has been good, it goes to the abode where the ancestral spirits feast and hold ceremonies as on earth, but if evil it must be tried by fire and, if not purified, it is destroyed.

Among the New Mexican pueblos the burial ceremonies vary from the ancient model and have been superseded or overlaid by the rites of the Roman Catholic Church. The articles found in the graves of the pueblos furnish to the archæologist the chief records of their history. From them are being recovered rare and significant pieces of pottery, ornaments and weapons, prayer sticks, and fragments of cloth, basketry, and matting from which the stage of culture and their relation to other tribes may be determined.

Innumerable other interesting customs might be added [1] to those already mentioned to show that the pattern of living, though varying somewhat from one community to another and from their ancient traditions, is substantially the same among all the pueblos. In spite of contact with whites and their alien educational forms — which must ultimately, perhaps, obliterate these customs — there is at bottom a spiritual dignity, a mystical philosophy, and a sense of social obligation which will enable the Indian to adapt some of the new without losing the power and beauty of the old, if he is allowed time and liberty to work out his own future.

[1] See *Jemez*, by Elsie Clews Parsons; and *Cochiti*, by Esther Goldfrank.

PART III

ARTS AND INDUSTRIES OF THE PUEBLOS

Though all the textile products of a primitive people may have crumbled into dust, the impress of basketry upon the surface of baked clay, and the copying of textile patterns upon the decorated surfaces of pottery, have preserved a faithful record of their weaves and designs. The pottery of the ancient cliff dwellers affords a striking example of this survival of textile ornament. . . . Portions of their primitive looms have been unearthed . . . textile patterns were scratched upon the smoke-blackened plastering of cave walls.

KENNETH M. CHAPMAN

Every article of Pueblo use as well as the most minute detail of the dance costume, has woven in its texture, the symbolic interpretation of man's relation to the Earth and to the fructifying principles of sun, wind and water.

ALICE CORBIN HENDERSON

The desert-dwelling tribes of New Mexico and Arizona need rain above all else, so that their religion, their ritualistic dances and ceremonies, their songs, their art and their decorations express a prayer for water.

Often on Hopi plaques of woven grasses may be seen the pageantry of storm or sunset in the many-colored cloud forms — harbingers of rain — that circle the basket. More easily recognized is the graceful butterfly that flits across jar or basket and is melodized so often in Indian song.

But highly conventionalized are the typical masked beings of mythology who decorate with huge cloud headdress many a richly colored basket. In the figure depicting the spiritual personage called the Shalako Katzina, any sense of representation is almost wholly lost, symbolism is complete and the decorative instinct uppermost.

NATALIE CURTIS BURLIN

CHAPTER VIII

WEAVING AND BASKETRY

Among the household industries of the pueblos, weaving and basketry were probably simultaneously developed. In prehistoric times, yucca leaves, mulberry bark and various fibers, hair of animals, feathers of birds, and fur of rabbits were used to make fabrics. Woven sandals and bits of cloth are found, along with fragments of baskets and pottery, in all the ancient ruins. Unquestionably a considerable degree of skill was developed among the cliff-dwellers. Recently a piece of lace, woven of fine short-staple cotton by means of a thorn or bone bodkin, without loom or warp, has been discovered in a cliff dwelling. Cotton had been raised long before the Spaniards came, and the Hopi presented the first white men they saw with pieces of cotton cloth. It is now grown and woven by them exclusively for ceremonial purposes, having been replaced in daily use by commercial woolen and cotton cloths.

There was doubtless a time when almost every Pueblo practiced weaving, each having a distinctive type and colors, but at present only the Zuñis and the Hopis carry on the industry to any considerable extent. The Navajos, having learned the art of weaving from Pueblo captives in the seventeenth century, now do the greater part of the blanket making for all the tribes. But the very rare old Hopi blankets found in collections, quite surpass the oldest Navajos in design, color, and fineness of workmanship.[1]

Bourke, writing of the Hopis fifty years ago, said:

[1] See Chapter XXIX, 'The Navajo Blanket and Its Weaver.'

'The Moqui show great skill in the art of knitting; while the women do all or most of the weaving of blankets, petticoats, girdles and sashes, the men, as do those of the Navajos likewise, reserve to themselves the task of knitting the blue woolen leggings worn by both sexes.'

With the Hopis and the Zuñis, weaving was a man's occupation, but among the Navajos it is now in the province of women. When the kiva is not in use for ceremonial undertakings, men will be found there, carding and spinning or working on a primitive loom suspended from the high ceiling. Pueblo men no longer weave blankets for themselves, but make the blanket and ceremonial dresses and belts for the women, buying Navajo and trade blankets for their own use.

The Hopi blanket dresses are striped at top and bottom in blue or dark brown on a black ground. The fast blue dye concocted from sunflower seeds or blue beans has been superseded by commercial dyes; but the sober tints of the Hopi are a contrast to the gayer red and black of the Navajo squaw-dress, often worn by the other pueblos as ceremonial garments. Woven belts, garters, and hair tapes in bright colors to complete the costume are still woven on a small 'heddle' loom, as a rule, by the men. Blankets and dresses are woven on the primitive outdoor loom described in Chapter XXIX.[1]

Among the Hopis, as among primitives everywhere, sewing is merely an auxiliary to the art of weaving — to fasten blanket edges together, or to make buckskin garments, using an awl of bone or steel in place of the needle. Beading, probably learned from the Northern Indians, is used in the manner of decorative embroidery.

Basketry was the forerunner of all loomwork, pottery-making, and beadwork. Whether developed consecu-

[1] See picture facing page 276.

tively or overlapping to some extent in point of time, they were the primary arts of primitive woman according to Dr. Otis T. Mason. In any given tribe and locality the kind of basket was determined by the materials available and the degree of ingenuity of the particular maker. The earliest Indian women, beginning without household utensils, thread or loom, searched their neighborhoods not merely for edible seeds and wild plants, but for pliable bark, fiber, twigs, and gum from which to manufacture necessary cooking and carrying utensils.

Nowhere has originality and skill in handicraft been more in evidence than in the use made of seemingly unadaptable materials. Baskets, contrived first as necessities of daily living, gradually became the concrete expression of the artistic instincts and emotions of generations of untutored women. Between the maker and the materials — wood, fiber, grass, roots — there was set up an understanding, a lore, as it were, which was cumulative and passed on from one to another. Styles of basketry, the natural outgrowth of the materials of a particular locality, became traditional, and were carried along as the tribes moved to new places where the basket-makers were compelled to adopt new materials.

The many varieties of baskets found among primitives are roughly divided into two general classes, woven and coiled. The woven types have warp and weft and naturally developed into an elaborate weaving technique. The coiled types have a continuous foundation of rods, splints, fiber, or grass, sewed together by laps of finer material. The basket might be made impervious by tightness of weaving or by pitch, gum, or even clay, plastered on the outside or inside.

A list of the uses to which baskets have been put occupies several pages in Mason's exhaustive volumes

on the basketry of the aborigines. Among the Southwest tribes they filled the places of articles supplied in modern life by wood, hardware, china, leather, and even coarse cloth. The Hopis still make the pannier and carrying-baskets, and both coiled and woven basketry for food utensils and as mats for the floor. The wattled hood over the fireplace plastered with clay, the cradle for the baby, shades for the doorway, twined fences and windbreaks, utensils for cooking with hot rocks, water-bottles and sieves, and, indeed, every use for which a bowl, a tray, or a plate might be needed, has been supplied by some variation of the expanded craft of basketry.

In addition to these everyday uses, baskets of special weaves and colors and materials are required in many ceremonies. At the Hopi Snake Ceremonial a sacred basket must be used for the corn flour with which the snake messengers are sprinkled at the end of the ceremony; on the altars and shrines to contain prayer sticks; for throwing in the women's Lalakonti Dance; for serving food to the guests at a wedding ceremony, and for holding the funeral offerings to the dead.

It does not follow, however, that all baskets in use were made by the women of the tribe using them. The Hopis use water-bottles covered with pitch and bowls made by the Havasupais and the Pimas. The Navajos habitually use for the medicine ceremonies a special basket made by the Pai-utes. The 'wedding' basket used by the Navajos in the marriage ceremony was once made by their women according to a strict ritualistic procedure, but if any one touched the basket before it was finished, it became unfit for use. To avoid the tedious purification ceremony which the maker must then go through, the Navajos now buy their wedding baskets ready-made.

TYPICAL BASKETS

Upper row, left to right: Old Pima, fret design; Apache corn basket with figures of men, mountain lion, and antelope; Navajo wedding basket with line of life from center to upper rim, now made by the Pai-Utes; wicker water-bottle.

Lower row, left to right: Second mesa coiled plaque, eagle design; Oraibi woven plaque, butterfly design; Oraibi woven plaque, eagle design; Oraibi woven plaque, whirlwind design.

Among the Hopis, basket-making has become a limited industry, confined to the women of Oraibi who weave willow-wicker plaques exclusively, and to the Second Mesa, where only coiled yucca articles are sewed. At all the eight villages and among the eastern pueblos a shallow, coarsely woven basket with stout wooden rim, for holding corn and fruit, is still made.

The primitive tools required for basketry were the awl or stiletto of bone, the stone knife and polishers of shell or stone, and these were supplemented by teeth and finger nails. Nowadays, steel awls, knives, and scissors have to a great extent replaced the ancient implements.

Throughout the year the basket-maker is collecting and preparing her materials. In order to get variety of color, the yucca must be taken at the right moment — yellow-green from the mature plant, bright green from the fresh shoots, heart leaves for the white. Willow must be gathered when it will be pliable and split well; coarse grasses, sumac, fern, and many other plants, according to the tradition and the taste of the maker, must be gathered and laid away. The Apache weaver depends chiefly on willow and devil's-claw (*martynia*) for her striking contrast of black and white. The Pimas and Maricopas use sisal willow, yucca, the squaw weed, the skunk weed, tule roots and also the stiff and difficult but effective black *martynia*.

When the materials have been brought together from far afield they must be moistened and split carefully, or dyed, in anticipation of the final process of weaving. In old baskets the mellow tints of vegetable dyes are evident. The devil's-claw gives a natural black; maidenhair fern, a deep brown; roots of the yucca, a rich red; squaw grass, in itself white, when soaked turns yellow, and, in very hot water, turns brown. Each woman has

her own recipe for distilling the colors she prefers from the plants, blossoms, and roots to be had in her neighborhood. Although aniline dyes are now used for the cheaper trade plaques, trays, and bowls, not a few Indian weavers still produce their best baskets by traditional methods of dyeing and preparation. Urine as a mordant (fixing agent) has been used for ages, and is still used almost universally among pueblo basket-makers.

It is natural that any stranger, looking at the weird faces of a kachina basket from Bácabi, or the intricate maze design of an old Pima, or the bird figures on Oraibi plaques, should inquire what they mean. But if he should ask the maker of a basket, she will look helpless and shy and refuse to answer. Her husband, perhaps, will try to explain that 'maybe, long time ago,' the kachina represented the masks of sacred personages, the Pima maze symbolized rivers flowing to the ocean, or the bird figure simulated the eagle whose plumage has been used for centuries in Indian ceremonies. But he is likely to add that it means nothing now. This may be true, but the medicine men and the wise ones hold these traditional designs sacred, and this reply may be merely a polite way of evading the too-curious stranger. Only the white man whose friendship and sympathy have been tested will be permitted to know that which is sacred lore.

The primitive maker, in the desperate struggle for existence, had no time to make intricate patterns, and it may have been a long time before she even discovered how to make every stitch occupy the same space. When she had acquired some skill, a variety of materials and colors, she inevitably developed geometric designs. Says Mason:

> When women invented basketry they made art possible. Along with this fact that each stitch on the same basket made

of uniform material, occupies the same number of square millimeters, goes another fact — that most savage women can count ten at least. The production of geometric figures . . . therefore is a matter of counting. . . . Many of the figures on savage basketry contain intricate series of numbers, to remember which cost much mental effort and use of numerals. This constant . . . use of numerals developed a facility in them, and coupled with form in ornament, made geometry possible . . . the ever present geometrician is the woman basket-maker. She knew lines, triangles, squares, polygons of all sorts, meanders and a set of cycloidal curves. . . . Many savage basket-makers, in trying to represent birds and clouds and the human form on their geometric material, conventionalized them, and then abridged these conventionalities.

As every craftsman knows, there is a pleasure in accuracy and, to some, gratification in mere repetition of design. The geometric designs, used in the first place for the decorative value of their lines and angles, were invented centuries ago, and if they had a symbolic meaning it may be unknown to the Indians of the present day. In trying to copy natural objects the weaver of baskets would have to use lines and angles to represent curved forms and this would lead to stepped or broken outlines. The process of conventionalization may have gone on until the original symbol became all but unrecognizable, as in the case of the Awanyu or plumed bird-snake.

To weavers of different tribes the same design may mean quite different things.[1] The zigzag, which signifies lightning to the Navajos and the Hopis, among the Pomos means a flowing stream, among the Thompson Indians of California, mountains and valleys, and to the Salish, a snake. In many baskets, two or more motives are combined, which adds to the complexity of their meaning and interpretation. It is unreasonable to as-

[1] See Chapter XIII, 'Design, Convention, and Symbolism.'

sume that every design on a modern basket or piece of pottery has a definite explanation. It may have had one long ago; it may just possibly have one now, if one can find the Indian who knows it. But only those who are truly learned and sympathetic with Indian mythology, poetry, and religion are capable of comprehending and interpreting its symbolism. The modern Indian, sensing that the traveler or the buyer wants a story-interpretation of the designs on his wares, will naturally offer any convenient and superficial explanation that may satisfy the customer's curiosity.

CHAPTER IX

POTSHERDS AND POTTERY-MAKING

THE Southwest is strewn with ruins and potsherds in which are embodied the cultural history of its sedentary peoples. Lacking written records, each fragment of textile and bone implement, each sherd of pottery, becomes a page of human experience to the observer who has the skill to read it.

From the crude gray wares of the most ancient ruins to the varied and highly decorated vessels of modern pueblos is a long story of evolution, of the development of an artistic sense and a skilled craft in the making of pottery. As life expanded, the prehistoric ages gradually merged into the historic period when the Spaniards began to put in writing what they saw of Indian arts and customs. What they described, however, was merely what was left of Indian culture after a long period of feudal wars, the shock of conquest and the consequent invasion of white civilization.

The scientist visualizes through these ruins and fragments the basket-makers of thousands of years ago, lining their wicker vessels with clay which hardened in the processes of cooking. This is supposed to have suggested to some ingenious Indian woman the making of better utensils by coiling strips of clay as she had sewed the rounds of her baskets. Such crude attempts gradually developed shapeliness, but for an indefinite period the paste was rolled and shaped without decoration and dried rather than fired, for hardness.[1]

[1] Brief digest from Kidder's *Introduction to Archæology* (1924) and his introduction to Guthe's *Pueblo Pottery-Making* (1925).

By the time the prehistoric tribes began to build houses of stone slabs and to gather into settled communities, they had taught themselves to make thin, hard, well-fired pottery of a gray color. Occasional pieces were washed with a white slip upon which irregular designs in black appear. When the neck of a vessel was so small as to make it difficult to insert the smoothing tool, the last few coils were left unsmoothed, and thus began a new, and ultimately a more elaborate coiled and corrugated ware. While some potters were inventing decorative indentations with the thumb, others continued to develop the black-on-white ware and constantly to improve it. Throughout the whole pueblo area these forms of decoration were more or less uniformly scattered.

Certain groups began to specialize in one or another type of dwelling, and, as they did so, each seems to have adopted one or another variety of these styles of pottery and to have perfected it. This intensive process gradually produced the 'classic' period, tentatively placed by scientists in the first thousand years of Christian reckoning. 'During this time the wares of the different settlements,' says Kidder, 'exhibit a bewildering variety and high artistic perfection.'

But in the next five hundred years, just preceding the Spanish discovery, the pueblo arts steadily declined, and no one has more tersely explained the reasons for their deterioration than Dr. Kidder:

> The years between 1000 A.D. and the Spanish invasion of 1540 were evidently a time of tribulation. The formerly prosperous communities of the North and South were abandoned, the population shrank, the arts degenerated, and when Coronado entered the Southwest he found the pueblos occupying a mere fraction of their former range. What brought about this decline is not surely known, droughts, intertribal wars, pestilences, inbreeding, may all have been in part responsible; but its principal cause was probably the increasing

attacks of nomadic enemies. At all events, pueblo culture of the sixteenth century was not what it had been in the past, and pottery-making suffered with the other arts. By that time the beautiful and elaborate, but difficult corrugated technique had been given up, and cooking vessels had become mere unornamented pots; black-on-white ware with its handsome, intricate geometric decoration had long been extinct, replaced by various local styles, few of which equalled it in technical excellence or artistic perfection.

What is known of prehistoric pottery has been learned from vessels and fragments gathered in the excavations of ruined villages. In old times pottery was buried with the dead and with them have been found the most ancient, the most precious remains of thousands of years of ceramic art, which now may be studied only in museums.

With the arrival of the priests, however, missions and Catholic cemeteries were established, all interments took place under the supervision of the Padres, and no more bowls and ollas went into the graves. Pottery, is, of course, short-lived; few vessels other than reverently guarded ceremonial jars, can be expected to escape breakage for more than a generation or two, and so we have practically no material to illustrate the changes which took place between the Conquest and the present day.

The dearth of whole specimens in the historic period will, therefore, have to be filled by studies from the rubbish heaps of old towns and dwellings and by 'reading backward' from a thorough knowledge of old modern pottery and that which is still being made. Archæologists, following the method of geologists, are reconstructing Indian life from the eighteenth to the twentieth century by studying the layers of débris where one culture is piled upon another as generation followed generation. The varying styles of pottery are 'the best indices to time-sequence,' says Dr. Clark Wissler, and the

researches now going on in the Southwest are retelling the history of its peoples and their culture by means of prehistoric architecture and ceramics.

The technique of pottery-making is traditional and unique. In order that the reader may conceive the amount of time and skill involved in making pottery a brief digest is here given of Dr. Guthe's description of the methods which he observed at the pueblo of San Ildefonso.[1] The potters at other pueblos, though differing in minor details, follow the same general procedure as that in use here.

The art of pottery-making is a traditional one — daughters learn from their mothers. There are no exact recipes for proportions and mixtures, no thermometers for testing temperatures, no patterns on paper for laying out designs. The perfection of each piece depends on the judgment and precision of the maker, developed by practicing the methods of her ancestors and by varying them as her skill and originality may dictate.

All the women of a pueblo community know how to make cooking vessels, at least; and they fill in their slack times with preparation of materials just as the Navajo woman has always a blanket on the way, or the Apache a basket in the weaving.

The gathering and preparation of materials — clays, temper, slip, and paints — must be undertaken some time in advance. These are: the red and white clays from old beds long known to potters; the light gray mineral earth called 'temper' to be mixed with them for toughness and to prevent cracking under heat; the slip or wash foundation paint of more delicate mineral earths; the hard yellow stone, and the guaco plants for making black paints.

Each of these must be got ready with infinite care

[1] Brief outline from Guthe's *Pueblo Pottery-Making.*

and labor. The crumbly clays are winnowed through the fingers or a sieve or by throwing from a basket till the material is free from coarse particles and of uniform texture; the tempering earth is pounded up and the yellow stone ground fine. The guaco or Rocky Mountain beebalm plants, found everywhere in this region, are gathered in the spring when tender and boiled in Apache-clay cooking pots from a half to a whole day until there is left a black sticky mass. This is set away to age, the longer the better, to make good black paint.

For the firing, sheep dung or cow or horse manure is collected, made into large circular cakes, dried and stored; and finally split cedar kindling must be at hand.

The equipment of the pottery-maker at San Ildefonso consists of earthenware moulding trays or *pukis*, often merely the bases of broken bowls or ollas; several gourd spoons or *kapejes* of different sizes; two or more scrapers of tin or a steel knife; some smooth, fine-grained pebbles, large and small, which are frequently heirlooms and which may have sacred significance. The potter will make her paint brushes of narrow slivers of yucca or soapweed, chewed at one end and trimmed, and of differing sizes. She will have an old sack or canvas or goatskin on which to do the mixing; boards to put under the moulding tray or puki on the ground and to hold the pots while drying; water in a bowl or lard pail close at hand; folded clean rags or mops for brushing on the slip; and various receptacles containing prepared paint and washes.

When the clay is ready for mixing and kneading, either red or white clay — never both together — is laid on the mixing place along with the temper, in about the proportion of two to one, and all is sifted through the fingers till uniform. Water is then mingled with it until

absorbed and the whole mass becomes of the consistency of putty.

At last the pótter is ready to begin moulding. No wheel is used, but sitting on her heels on a mat, with the puki before her, the moist mass at her right and all her implements within reach, she proceeds as described by Dr. Guthe:

> The potter first forms a pancake-shaped pat of paste from six to eight inches in diameter; this she presses into the mould or puki, to form a base. Then the walls of the vessel are built up by the addition of successive ropes or rolls, of paste laid one upon another. The small bowls are the only exception, for they are formed in the hands of the potter from a single lump. . . . The potter usually builds two or more vessels at once in order to permit work upon one while the other is undergoing a brief period of drying. The preliminary shaping of the vessel is done either in the course of the building or after the building has been completed. The obliteration of the junctions between the rolls, and of finger marks, is accomplished with the kapeje or gourd-spoon, and further use of this implement aids in giving the vessel its shape. The final step, the finishing, consists of going over the entire vessel carefully, first with the kapeje, then with the fingers, to remove slight irregularities, to even the lip and rim.
>
> The finishing is a slow, exacting process, and the difference between the artist and the mere pot-maker comes out at this stage of the work.

In one day she will have made from five to thirty pieces according to her swiftness and the size of the vessels. And during these hours she will seldom change her position, though great fatigue of back and muscles is inevitable from the constrained posture. The four principal kinds of pieces are bowls, cooking pots, ollas, and unusual shapes such as prayer-meal bowls or boxes, double-mouthed vases and those with handles. During the moulding, the fingers constantly remove rough particles from the paste, and pots with small mouths

will obviously take much more time and care than open bowls.

As each piece is finished, it is set in the sun for preliminary drying. If slight cracks appear under this test, they may be repaired, but if considerable, the piece must be ground up and the material used over again. There is still the tedious work of scraping to remove all marks, thinning the sides, and smoothing off, before the wash or slip may be laid on.

Up to this point the procedure is similar for all vessels, but it will now vary according to the kind of decoration to be applied. The succeeding processes are slipping, painting, and firing. Slipping is washing on a thin layer of clay, white or some shade of red, to make the smooth surface and color background for the decoration. The slip is applied with a folded rag used like a broad brush; then thoroughly wiped or, in some cases, polished with stones, and set in the sun to dry. This polishing is laborious, but adds greatly to the final appearance of the piece.

In the drawing on of the design — usually in black paint — extreme precision combined with skillful free-hand motion is necessary. As in etching, the line once placed cannot be altered. The yucca brush is held in the right hand as one would hold a pen, and the arm is unsupported. The design must be adapted to the curved surface, which demands skill in adaptation as well as great steadiness of hand. Maria Martinez sits with the bowl in her hands for a few minutes, as if she were working out in her mind the combination of elements which she will use, and then proceeds swiftly and with decision. Maximiliana Martinez begins at once, letting the design develop and filling in her ideas as they occur to her. Antonita Roybal, whose designs are more elaborate, refers to drawings or photographs of old vessels and

uses a pencil to sketch in the general outlines. Nampeyó of Hano, the Hopi artist, was accustomed to cover her vessels with designs rapidly, without measurements and without mistakes.

Firing, the next step, is the most critical of all. Any smooth level dry spot, somewhat protected from the wind, will serve for the oven. After the preliminary fire dies down to a bed of coals, the oven is set up. A grate may be made out of an old stove grate, or brick and iron junk supported with stones and cans. The pieces, set upside down, are crowded close together. Around the grate is set on edge a wall-like ring of dried slabs of dung, prevented from touching the bowls by stone and brick props on the inside. The fire is started with cedar bark, all around at once, then a cake of dung is put on top and all the smaller spaces covered with cakes of dung and scraps of tin. Circulation of air must be allowed for, so that the pieces shall not be smoked. Much experience and meticulous care are required to control the heat and bring the pots through evenly fired. The whole process requires about half an hour, and as soon as it is completed, the oven is cleared and a new batch is put in.

After firing, the dead white slip takes on a slightly pinkish-brown tinge. The red slip turns dark with heat, but reappears as red when cool, the yellow paint becomes orange-red. Cooking vessels made of a special clay, not tempered, become a rich orange color which is gradually blackened when they are used for cooking.

Polished black ware is made by quite different treatment. It has already been washed with a thin red slip; the oven is given less air and a hotter fire is used. At the stage when colored pots would be removed, the whole oven is suddenly smothered with a washtubful of loose manure, and more is added from time to time,

which produces a dense white smoke. Thus carbon is deposited on the pots, and when removed they are of a shiny black color. For making matte or dead-black designs on polished black ware, the ground-up yellow stone, mixed with water to which about one fourth guaco has been added, is used. In firing, it changes from its original color to dead black. This new type of decoration was invented by Maria Martinez at San Ildefonso in 1921 and has become very popular.

Carelessness and accident often cause the loss of some pieces and imperfections in others. When cooled off, the vessels are dusted to remove ashes and dirt and wiped finally with a slightly greasy cloth to give a faint luster. The total time consumed in the whole process of making pottery is difficult to estimate, since it is continually interrupted with household and other tasks, but it will necessarily take from seven to ten days before the pieces can be stored away or marketed.

CHAPTER X

MODERN INDIAN POTTERY

At the beginning of the historic period all the pueblos made some kind of pottery, if only for cooking utensils. At present, five — Taos, Picurís, San Felipe, Jemez, and Sandía — no longer make salable wares; some of the others produce only poorly fired and designed pieces; leaving nine or ten pueblos whose pottery is of artistic and commercial importance.

Decline in quality and design at many pueblos has been due to several causes: the substitution of American hardware for their homemade cooking pots, greater returns from farming, and the very low prices offered to Indian women for their wares by tourist and trader. Many travelers, ignorant of the technical and artistic differences between well-made pieces and the hastily made and gaudily decorated stuff offered for sale, will not pay for the better sort. For some years Indian women have had very little inducement to make their best.

The trader, though quite aware of the difference between good and poor, is often unwilling to pay adequately for so fragile a thing for which the market is at best uncertain. At one pueblo where good pots were formerly made, 'rain-gods' are now produced by the barrelful, for which the makers get a few cents apiece. Good wares have been scarcely worth the making and have literally gone a-begging on the streets. Wherever the villagers have good farm land and a sufficient supply of water for irrigation, pottery-making has a tendency to die out.

One of the fortunate, though indirect, results of the

archæological explorations going on in the Southwest, is the growing understanding between the scientists and their Indian assistants. Thirty years ago, when Dr. Fewkes, of the Bureau of Ethnology, was excavating Sikyatki, near the Hopi First Mesa, he gave opportunity and stimulus to Nampeyó, a Tewa Indian woman of Hano, who has made a name for herself as an artist-potter. Her husband was one of the workmen at the excavations, and Nampeyó, already a skillful potter, observing the beautiful designs on the old bowls unearthed from prehistoric graves, copied them on her own. She hunted for clays with which to reproduce the old and richer colors and succeeded in reviving a fine ancient type of pottery. With the approval of the explorers and a market created by their advertising, she was able to sell her vessels for prices commensurate with their superiority, and in her age the house of her family has become a goal for the sight-seer. To her daughter she is passing on a measure of her skill and its rewards.

Several years later, Dr. Edgar Lee Hewett, of the American School of Research, while excavating the Pajarito Plateau at Puye, employed the Indians of San Ildefonso. They became greatly interested in the artifacts found in the ruins, discussing them with the scientists and comparing them with their own products. Dr. Hewett suggested to the women that they try to make pottery as fine as the ancient pieces they had discovered. In spite of the lack, at that time, of a profitable market for better wares, they gradually perfected the polychrome and black styles which they were making. In order to encourage them, the explorers themselves bought pieces which neither the tourist nor the trader would adequately pay for. Recently, at the annual Santa Fé Fair, prizes for the best Indian pottery have been offered, until San Ildefonso ware has become

widely known for its artistic beauty and finds ready sale.

With this stimulus several superior artist-potters have developed, among them some who, like Nampeyó, have become celebrities. Maria Martinez, in 1921, invented a variety of black ware by etching dull black designs on a polished black background, a style now imitated by other potters and commercially popular. Other variants have been discovered and older types of fine design and quality are being revived at several villages.

The kinds of pottery most frequently seen in the Southwest at the present day are:

(1) Cooking vessels made of the special 'Apache' clay, untempered and without decoration, which gradually blacken with use in cooking over open fires.

(2) Plain wares, polished red-and-black — the red, a natural color after burning over a somewhat open fire; the black, smothered till the blackening by smoke becomes permanent.

(3) Decorated ware, black on light, of which the bottoms and neck interiors are painted red.

(4) Polychrome, or black-and-red on buff, now made chiefly at San Ildefonso; and

(5) Black on dark red ware, which is not very common.

In addition to shallow trays, bowls, storage jars, and ollas there are special shapes and designs used in religious ceremonials, for holding the sacred meal with which the dancers in the rites are sprinkled. Some, of the rectangular shape, have steps at either end, symbolizing clouds or mountains, and decorations of frogs, tadpoles, butterflies, and the snake, signifying petitions for rain.

To a surprising degree the nine or ten pueblos which still make pottery have kept their distinctive wares untouched by native American influences. The variety

TYPICAL POTTERY

Upper row, left to right: Cochití, black on light, birds and leaves; Zuñi, with characteristic squash rosette and deer with visible hearts and white rumps; Acoma, intricate wing design with antelope and road-runner birds.

Lower row, left to right: Nampeyo bowl made at the First Mesa, shaded apricot yellow, characteristic flattened top, with feathers and sweeping conventionalized design; black bowl made by Maria Martinez of San Ildefonso, snake design in dead black on polished black; San Ildefonso, black and red on light ground, with clouds and falling rain design in center; San Ildefonso, similar to the last, with Awanyu bird design.

characteristic of each village was originally determined by the kind of clays and tempers available, and by the use of traditional decorations which their conservatism did not permit them to alter. The highly polished wares of San Juan, burned to a deep red above and undecorated below, and of Santa Clara, smoked to a lustrous black and with wide-flaring rims, are still their characteristic products.

San Ildefonso seems to have borrowed the plain polished black type from Santa Clara, but in recent times has developed a great variety of models and decorations. To the original black on light of the eighteenth century has been added black on red, and black-and-red on light slip, and, very recently, the polished black with decorations in dull black. This somewhat sudden expansion of varieties has been due to encouragement given by artists and scientists at Santa Fé and to the stimulus of ready sale to travelers. These potters now have opportunity to study ancient designs in the Museum of Archæology and are producing a wider range of decorations than any other pueblo.

At Santo Domingo pueblo the old-time wares were characterized by an extraordinary number of striking, yet simple geometric designs within bands and a variety of graceful leaf and flower forms, in black on light ground. The women of this rather conservative pueblo do not employ the sacred rain symbols — clouds, lightning, falling rain, terraces — on ordinary jars, but only on ceremonial vessels. At Cochití, only a few miles away, there is a much freer use of rain and fruition symbols, with much less rhythmic repetition, and the design looks as if gayly scattered over the bowl. Hitherto the colors have been black on white, but red is beginning to be used, and is likely to precipitate changes in the general character of Cochití wares.

The Tsia (Sia) have made fine pottery for centuries, tempering their excellent clays with ground volcanic rock. The designs in black-and-red on light slip have a wide range in geometric figures, leaves and birds. They have long exchanged their pottery for the produce of the successful farmers of Jemez.

Of the ten western pueblos, three only make pottery of any importance. The ware of Acoma is highly prized for its thinness and lightness as well as for the wide range of its charming decorations. The clay used contains gypsum and the potters prefer to grind up old sherds for tempering material. In addition to ancient black on white designs there are plant forms and conventionalized parrots with curved beaks, done in red and orange on a striking white ground.

At Zuñi pueblo, large food bowls, decorated with animal figures and squash-flower rosettes, in black-and-red on ivory white background, are the distinctive ware. There are deer with visible hearts and white spots on the rump, antelope, conventionalized butterflies and road-runner birds, combined with elaborate geometric designs around the neck of the vessel. The moulded frogs often seen on the sides of modern pots may be revivals of prehistoric designs. Old pots are frequently nicked around the top from the use of gourd dippers, a peculiarity due to the kind of materials found in this region.

Hopi pottery, which survives only on the First Mesa, formerly resembled Zuñi in form and decoration. But in the last generation great changes have taken place, owing to the revival of prehistoric forms and decorations by Nampeyó of Hano and her successors. They have unusually fine clays, and slips which burn from cream to deep orange and the decorations of birds, feathers, and wide spirals in black or black-and-white on apricot-tinted slip, are very beautiful. The characteristic shape

is a wide low bowl with the upper portion drawn in to make the top almost flat. Well-finished specimens are perhaps the most beautiful products of modern pueblo pottery-making.

To appreciate fully the pottery of the Pueblo Indians, one must see it against the background of the difficult conditions under which it is made. One must visualize these tedious, laborious, skillful processes carried on in the midst of domestic confusion; the contest with wind and weather and variable materials, and the foresight required to overcome the elements of possible failure. The traditional knowledge accumulated through centuries, which the good pottery-maker must possess, is seldom measured at its proper worth. An occasional woman may have an artistic sense and originality comparable to other kinds of genius in the world. It should not be overlooked that recognition and financial reward is as necessary to develop the abilities of Indian artists as those of other races.

Until the present generation, every Pueblo Indian was a weaver or a potter and, in some degree, a decorator if not an artist. His unconscious aim was to beautify life through the adorning of natural objects and he inevitably went to Nature for his motives. As his imagination developed, the high colors, bold outlines, and strong contrasts of the landscape suggested and supplemented contrast and form in the design of basketry and pottery. These household arts not only satisfied the need for self-expression, but also the pride of craftsmanship. Uniformity, symmetry, even the technical limits of conventionalized patterns had a definite relation to his spiritual conceptions, as decorative symbols cherished through the ages became the concrete expression of his thought. It is this close relationship of material objects, symbols, and decorative impulse with the personal life and belief

of the Indian himself, which gives his art its vitality. Nature and Man's Spirit are woven and moulded together, concrete and unified in primitive art forms.

But in this day of manufacture and sale the pots and baskets of the Indian are no longer useful objects to be beautified, used for a lifetime, and buried with their owner in the grave. They are products to be sold for bread and meat and will pass into the hands of aliens where their symbolic significance is unknown. To the old Indian everything had a being of its own, and it must seem to the Indian potter that something dies when the pot passes into the hands of unsympathetic foreigners.

Thus suddenly, in one generation, the pottery-makers have come to be two classes — the many, who make pots for sale to the trade; and the few, who become professional artists, striving to save from oblivion that which is rapidly ceasing to be personal and sacred. Indian craftsmanship may survive with enough encouragement; but the age-old creative art-sense of a whole people is becoming the precious possession of the few artist-craftsmen. It is impossible to say how long they will be able to keep the vitality of primitive inspiration in the midst of an alien material culture.

CHAPTER XI

TURQUOISE, SHELL, AND SILVER ORNAMENTS

Turquoise, which occurs all over the world, though not abundantly, is almost invariably found in barren, arid regions. From prehistoric times, among the Indians of the Southwest, it has been the most precious of jewels. Because of its rarely beautiful color, it has been used in ceremonies and associated in chants and mythology with whatever is rare, mysterious, and religiously significant.

Estsan-ad'lehi, the goddess-mother of the Navajos, often called 'She-Who-Changeth,' because whenever she grew old she went away and came back young, is also called the 'Turquoise Woman.' In the story of the wedding of the Sun with the goddess, the Sun built a palace of four parts, floating in the Western Ocean like an island. The first part was of turquoise, the second of white shell, the third of yellow abalone, the fourth black, of cannel coal. When the goddess came back from her periods of rejuvenation, her dress of turquoise became a dress of white shell, and she is therefore sometimes called the 'White Shell Woman.'

Johano-ai, the Sun-bearer, has five horses, on one of which he rides daily, carrying the golden disk from east to west; a horse of turquoise, a horse of white shell, a horse of pearl shell, a horse of red shell, and a horse of coal black. When the skies are blue and the weather is fair, Johano-ai is riding his turquoise horse or his horse of white shell or pearl; but when the heavens are dark with storm, he has mounted his red horse or the horse of coal.

Among the four sacred mountains, the one at the

south was adorned with turquoise, fastened to the earth with a knife of stone, and covered with blue sky. There dwelt the Turquoise Youth and the Turquoise Maiden.

This gem stone, variously described as blue or green, varies, in fact, from a delicate sky-blue, robin's-egg blue, through every transitional shade to dull green. Some specimens, when exposed to the sunlight, deteriorate in color and may turn from blue to green with age. This variability gave rise to the idea that the gem may vary with the moods of the wearer, and it is generally believed to be a 'lucky' stone. Only less beautiful than the pure turquoise is the turquoise-matrix, in which the blue is veined with brown, black, or white.

The stones which the Indians of the Southwest have treasured from early times came chiefly from two districts — Los Cerillos, near Santa Fé, New Mexico, and Turquoise Mountain, in Cochise County, Arizona. These mines have been worked for centuries, and large Spanish workings at Los Cerillos were undermined and fell in 1680, killing a number of Indian miners. Tradition has it that this catastrophe was one of the causes of the uprising against the Spanish. Although it is probable that certain Indians know of secret places where turquoise may be found, since 1892 these mines have been owned by commercial companies from whom the Indians must buy the uncut material. The turquoise heirlooms handed down in Indian families are likely to be of rare quality, while modern stones, whether in the hands of Indians or white traders for sale, are extremely variable in color and quality.

The primitive Indian used these gems not only for personal adornment, but as an essential to ceremonial equipment. Coronado observed that the natives sometimes offered turquoise in their worship, which, he said, 'was principally of water.' At San Ildefonso and other

Tewa pueblos, the kiva of the 'Ice People' is called the 'Turquoise Kiva.' Instead of cutting his stones into regular shapes, the Indian craftsman takes artistic advantage of their charming irregularities, using polished, symmetrical pieces as earrings and in necklaces and interspersing drilled beads with odd bits of turquoise, rosy shell, and cannel coal, or obsidian. The value of such necklaces depends not only on the size and color of the turquoise, but quite as much on the fineness of the thin, flat, gray beads, polished and pierced with infinite labor. In early times strings of turquoise beads were more common than now. In the excavation of Pueblo Bonito, in Chaco Canyon, no less than thirty thousand perforated turquoise beads were found in a single room, along with many other objects which show extraordinary skill in inlay work.

The turquoise mosaics which have been discovered in many ruins are perhaps the most beautiful of all ancient ornaments. The foundation of the mosaic was of shell, wood, bone, jet or other stone on which, in a bed of gum or asphaltum, were laid bits of turquoise, or other bright stones, in a regular design. Dr. Fewkes describes a pendant found in an Arizona ruin as rudely representing a frog, the foundation of which was a bivalve shell, the matrix of pitch, the setting of turquoise nearly conforming to the shape, with a bit of red jasper set in the center of the back.

Turquoise was widely used for barter with the Indians farther south in return for iridescent shell and parrot plumes. In the seventeenth century we read that the Apaches came to trade at Pecos for turquoise. But even then the art of mosaic-making, which had long before been highly developed in Old Mexico, seemed to have deteriorated in the north. The only mosaics now seen are worn by the Hopi women. They are roughly made of

wood with piñon gum in which turquoise bits are set. Turquoise continues to be the chief jewel of the Southwest and among the Navajos its amount and purity of color is an indication of the wearer's social standing.

In Indian legends, particularly those of the Navajos, there are frequent references to shells as ornaments possessing magic qualities. During their prehistoric wanderings the Pueblos are said to have come to Chaco Canyon where a community building had been begun. There descended from the heavens the Divine Gambler, a Gambling God whose talisman was a great piece of turquoise. He challenged the Pueblos to all kinds of games and contests and in them was always successful. He won their picked men and some of their women and made slaves of them, compelling them to work on the Great Fortress of Kintyel. In addition to losing their personal liberty, they lost also beads, shells, jewels — all their valuables. The people of one of the pueblos gambled away two immense shells, their greatest treasures, which the Sun coveted, but which the Gambling God would not yield to him. Thereupon the gods held a Council in which the animals took part and decided to prepare their champions to go against the Gambling God. Ultimately the Pueblos won back all their shells, beads, and jewelry, and the two Sacred Shells of Kintyel, which they gave to the Sun.

Among aborigines anywhere the use of shells as ornament is natural enough, but so far from the seacoast as Arizona it is somewhat remarkable. The shells found in ruins in the Southwest, which are still generally used by the tribes for making ornaments, are either fossils or have been traded for with the Coast peoples. The oldest are prized as amulets and charms, and are often found on shrines and in the bags of medicine men, or buried with the dead. The farther from the sea, the more mysterious

they were, it would seem, and therefore the more precious.

Shells were used as utensils, as spoons, scrapers, knife edges, and cups where stone was scarce, but later almost exclusively for the making of beads by means of a primitive drill. Clam and abalone were most common, and the bright-hued spondilidæ, of which so much is seen in necklaces along with turquoise, are particularly valued. Shell beads vary greatly in thinness and perfection of workmanship, and the finest old necklaces are usually to be found among those left in pawn with some trader by old Indians who are not able to redeem them. Since these ornaments have a ceremonial value as well as constitute a sort of savings fund, the owner will not part with his inheritance except in the last extremity.

Although the characteristic ornaments of the Southwest Indians are now made largely of silver, silversmithing is a comparatively modern craft learned from the Spaniards and practiced chiefly by the Navajos. Free metals are scarce in this region and the Pueblos were not workers in metals in early times. The Hopi word for silver is 'shiba,' a little white cake, referring to the Mexican silver coins which they saw for the first time in the sixteenth century. The Pueblos, east and west, trade with the Navajo silversmiths for silver beads and for turquoise and shell ornaments.

The traveling silversmith is not infrequently a handyman or even a blacksmith on occasion, and the delightful jewelry produced by him is achieved with the crudest of tools. A hammer, some chisels, an etching tool, and a small improvised anvil are the modern substitutes for the stone implements with which the prehistoric craftsman worked. With this handful of small tools, a few glowing embers, and sitting on a sheepskin, he fashions out of the malleable Mexican silver coins a variety of

distinctive ornaments: bracelets, rings, buttons, belt medallions or conchas, bow-guards, saddle and bridle decorations, hollow beads, delicate pumpkin-flower dangles, rainbow-shaped pendants, and silver droplets of water. A thousand variations are seen among those worn in profusion and according to their means by all the Southwest tribes. Many pieces are etched with rain and fertility symbols: thunderbird wings, cloud-curves, sacred feathers, seeds, pods and leaves, snake heads, arrows, drops of water, and triangles of far-off falling rain.

Recently machine-made imitation Indian jewelry has invaded the market, probably because it can be sold at greater profit than the hand-made article. If it be remembered that the Indian craftsman or artist rarely makes two articles alike or even wholly symmetrical, designs which are too regular and too perfectly polished should be critically regarded.

Besides turquoise, shell, and silver work, there are other handicrafts which were once important and upon which the craftsman exercised his artistic sense. Arrow-chipping was formerly a skilled vocation, but this and the decoration of ceremonial and other implements have almost died out. Only in the museums may now be seen wonderful specimens of these products of prehistoric skill and taste.

CHAPTER XII

PAINTING IN SANDS AND IN WATER-COLORS

THE most ancient type of painting practiced by the Southwest Indians is 'dry' or sand painting, used upon altars and in many religious and healing ceremonies. Because associated with religious observance and the cure of sickness, its symbols were formerly kept as secret as possible and have rarely been seen by aliens until the present century.

The art of dry painting in colored sands was probably widely practiced among Western tribes in prehistoric times, but at present is chiefly known among the Hopis and the Navajos. Dr. Washington Matthews, who was long stationed among the Navajos, says their designs are larger, more numerous and more elaborate than those of other tribes and, it may be added, the Navajos have recently been more willing than other Indians to allow their ceremonial designs to be seen and to be reproduced.

On the walls of the railway station at Gallup, New Mexico, may be seen special designs appropriate to the ceremony of 'Blessing the House,' which have been used for centuries in sand paintings. When, by a previous ceremony, the evil spirits have been driven out, all that is perfect and beautiful is invited to take possession of the dwelling and its occupants, by means of the traditional chant, which is sung as a processional by the medicine men. When the procession, encircling the house, returns to the sand painting, the sponsors of the house stand upon it. The Man Sponsor standing on the painting to the east representing the Pollen Boy, who symbolizes fertility; the Woman Sponsor standing on

the one to the west representing the Beetle, typifying Harvest. The words of the chants which are sung during this ceremony are of classic beauty and constitute a blessing not only on the house but on everything relating to its owners. One verse, freely translated, is as follows:

From the farthest Mountain,
May the mountains be perfect;
May the valleys be perfect;
May the rain be perfect;
May the trees on the mountains be perfect;
May the corn in the valleys be perfect;
May my garments be perfect;
May my sacrificial offerings be perfect;
May the pollen make for me perfect increase;
May the Harvest Beetle bring me perfect crops;
May all that is mine be made perfect.

Washington Matthews thus describes the process of making sand paintings:

Some of their larger pictures, in their great nine day ceremonies, are ten or twelve feet in diameter, and represent in conventional forms, various gods of their mythology, divine ceremonies, lightning, sunbeams, rainbows, mountains, animals and plants, having a mythic or traditional significance. Among this people, in order to prepare a groundwork for a sacred picture in the lodge, several young men collect, with ceremonial observances, a quantity of dry sand, which is carried in blankets, thrown on the floor of the lodge, spread over a surface of sufficient size and to the depth of two or three inches and made smooth and level by means of the broad battens used in weaving.

The pigments represent the five sacred colors of Navajo mythology — white, blue, yellow, black and red. For the greater part of the work, the white, yellow and red are made of finely powdered sandstone of these colors; the black of powdered charcoal mixed with a little sandstone to give it stability; and the blue (really gray) of black and white mixed. These powders are prepared before the picture is

begun. . . . Sometimes for certain ornamental parts of the work, more precious pigments than these are used. To apply the pigments the artist picks up a small quantity between his first and second fingers and his opposed thumb and allows it to flow slowly as he moves his hand. When he takes up his pinch of powder, he blows on his fingers to remove aberrant particles and to keep them from falling on the picture out of place. When he makes a mistake he does not brush away the colored powder, but obliterates it by pouring sand upon it, then draws the correct design on the new surface.

The drawings are begun as near the center as the design will permit. . . and according to an exact system — and not the slightest deviation can be made from the established design. The naked bodies of the gods are first drawn and then the clothing is put on.

The shaman who enacts the part of the master of ceremonies does little more than direct and criticize the work. A number of men who have been initiated into the mystery of the ceremony perform the labor, each working on a different part and often spending many hours on one picture.

When it is finished, ceremonies are performed over it, and then with song and ceremony it is obliterated. When no semblance of it remains, the sand of which it was made is gathered in blankets and thrown away at a distance. . . . The Navajo make and destroy a picture on one day. No permanent copies of the dry-paintings are preserved; indeed, until recently they had no means of making such copies. The paintings are not made in summer, hence their designs must be carried from winter to winter in the fallible memories of men; yet the shamans declare that the pictures have been transmitted unaltered for many generations.

The sand painting of the Hopis differs from that of the Navajos both in method and content, though its purpose is the same. The field of the picture is secretly made in the kiva, of valley sand sifted on the floor from a basket. The chief of the ceremony begins on the outside of the ceremonial circle and follows the cardinal points in the use of the sands: first drawing yellow (north), then green or blue (west), then red (south), and finally white (east).

The painting may be allowed to remain for several days; but when it is wiped out, pinches of the sands of which it is composed are deposited in prescribed places — a portion of the Antelope dry painting is placed in a shrine at each cardinal point by the Snake Chief.

Dr. George A. Dorsey thus describes the sand painting made in the Powamu Ceremony of February, in the Hopi villages, at which initiates are received:

> A level ground of reddish sand is first sprinkled thinly on the floor in a four-foot square. Upon this is laid, by means of sand trickling through the thumb and forefinger, four straight bands, the ends of which terminate in a terraced rain-cloud symbol, from the points of which depend black symbols of turkey-feather *nakwakwosis*. The bands are colored after the symbolism of the four directions, and collectively they are known as the 'home' into which the candidate is welcomed during his initiation. Occupying the center of the square is a large circular squash symbol, also repeated at each outside corner of the field. Scattered here and there are numerous small spots of many-colored sands which collectively typify the various Hopi food seeds. In front of the field are outlined four semi-circular rain clouds in black, from each of which a turkey feather symbol also depends.

The accompanying pictures of sand painting, made by Chee Teasi-Ah (Red Point), who signs his name Manuelito, and used by him in healing ceremonies, were photographed by Dane Coolidge. The meanings of the symbols were given by him and interpreted by an expert in the Navajo language.[1]

Rocky walls and stray boulders in many places in the Southwest bear pictographs and petroglyphs, attributed to the cliff-dwellers or to the ancestors of the Pueblos. As yet no adequate study of their significance has been made, but they testify to the ability of the primitive peoples to draw long before they could write. Primitive

[1] See Chapter XIII, 'Design, Convention, and Symbolism.'

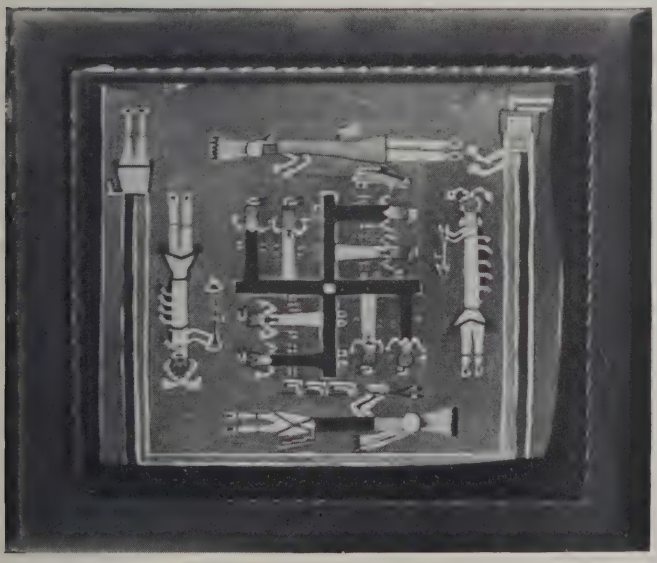
Two Sand Paintings

Bear and Big Snake

This sand painting is made to cure women who have been thrown into a bad state of mind by seeing a bear or a snake. The four white tracks below must be followed by the patient, who is then seated in the middle of the painting. The four bear tracks in the black center represent the feet of Woman Who Changes to a Bear. She was killed by Leyaneyani, Reared Under the Ground, her brother, whose figure is seen below at the left, and her feet were cut off. The figure at the right below is the Grizzly Bear. The big blue-necked snake which surrounds the sand painting is the holy snake given by the Turquoise Goddess. On its body are squares, which represent its house, forked lines like deer tracks for the fawns which are its food, and half-circles representing the summer and winter new moons.

The Whirling Logs

The cross in the middle represents two whirling logs on which Natinesthani, He Who Teaches Himself, was caught in the whirlpools of the Colorado River, after floating down the San Juan in a hollow log. The eight figures seated in pairs on the ends of the logs are yeibitshai, or gods, the black figures being men and the white ones women. The god at either side is the Humpback yeibitshai, who carries on his back a black bag which contains the he-rain, or heavy, black rain. At the top, in black, is Hastséhogan, the House God, and at the bottom, in white, is Hastséyalti, the Talking God. These all assisted Natinesthani in his struggle with the water-gods of the whirlpool. Encircling the whole is the Holy Rainbow, upon which the Talking God travels.



TWO SAND PAINTINGS
Made by Manuelito, of Red Point

skill of hand was developed to a finer point by the decoration of pottery and the drawing of symbolic pictures with colored sands. Skins and bark were the only materials on which pictures could be made; and when the Spanish came, the Indian artist, for the first time outside his traditional crafts, found opportunity to draw and paint imitations of Spanish Church pictures.

Water-color painting is a very recent development among Indians. In Government schools, Indian children had for the first time free use of paper, crayons, and paints. Ta-E, the first of the water-colorists, whose Spanish name was Crescencio Martinez, was encouraged to draw and paint by the teacher then in charge of the San Ildefonso Day School. His pictures attracted the attention of the scientists and literati at Sante Fé, but, as he died prematurely, very little is known of his work.

Meantime, another teacher in the Hopi Day School at Moenkopi, set his pupils to drawing and painting the picturesque figures of the kachina personages, and these pictures were discovered by John De Huff, the Superintendent, who recognized in them a new field for Indian talent. Somewhat later, Mr. and Mrs. De Huff were stationed at the Indian School at Santa Fé. Elizabeth Willis De Huff selected from the best map-makers of the school eight boys to draw pictures of the Santo Domingo Corn Dancers, a complicated and colorful group of figures. Among these boys, who remained at the school for several years, Fred Kabotie, a Hopi, and Ma Pe-we (Velino Shije), of Sia, produced interesting and original work, and, although quite young, are becoming well known.

Alfonso Roybal, more generally known by his Indian name Awa Tsireh, a man of San Ildefonso of a family that has produced some women pottery-makers of distinction, was stimulated also to try to paint. He is now

the best-known painter of his pueblo, which has become in recent years a center of Indian pottery-making and painting. One woman artist, less known and less prolific, is Tonita Pena, born at San Ildefonso, but now married and living at Cochití. Her work is chiefly interesting because of its truly primitive character in depicting the dances precisely as they are put on.

This little group, helped along by the artist colony of Santa Fé, received national recognition at the Independent Salon in New York, held in 1922. Their simplicity and earnestness had been already commented upon by the authorities of the Museum of Archæology and now the art critics acknowledge them as 'valid for all time.' E. H. Cahill declares that 'they mark the birth of a new art in America, the expression by the Pueblo Indian of his rich ceremonial life in the art medium of the white man. . . . Their pictures record the emotional quality, the very feel and color and movement of the astounding Pueblo ceremonies . . . in them one feels the solemnity of great quiet places, the delicate embroidery of the clouds against the endless heights of the desert air . . . the mesa rising suddenly out of the arid expanse.'

Walter Pach points out that in these paintings there is no break in the continuity of the Indian's thought and art when he goes from sand painting before his altar to the decoration of a cooking bowl. He comments on their unbounded sincerity, which gives them place among the Great Primitives; on their quick, sure strokes; on the fact that the drawings move in rhythms like those of the dancers or those of the eagles whose flight the dance symbolizes. They are derived from an immediate response to the scenes they depict, 'an instinctive rendering of things seen,' and do not come from the inheritance of European tradition and technique.

Painting as a profession is evidently only in its be-

ginning and its future is dependent on the encouragement these young artists receive in the sale of their work. The admiration which their canvases and drawings has created has already given impetus to younger Indian boys and girls who have some native talent.

CHAPTER XIII

DESIGN, CONVENTION, AND SYMBOLISM[1]

On the walls of canyons, on the sherds of prehistoric cliff dwellings, on modern pueblo pottery; on Navajo blankets, silver ornaments, and sand painting; on Hopi, Pima, and Apache baskets, are found a multitude of designs having certain resemblances to one another. Ages ago they were perhaps created accidentally or instinctively, and doubtless in prehistoric times became imbued for the Indian with poetic and religious significance. But not until the modern ethnologist and explorer began to piece together and interpret them could they have tangible meaning for students of mythology and primitive art.

Toward the end of the nineteenth century, Cushing, Fewkes, Holmes, and Mrs. Stevenson began the arduous task of obtaining from living Indians the meanings of these symbolic messages to the Powers of the Universe. So much of what is known is still tentative, and so much more is still to be deciphered, that only the merest outline of the subject can be passed on as yet to the lay reader. When the scientists now working at Santa Fé on pottery design, in collaboration with Indian artists, shall have studied and jointly interpreted the masses of material available, a world of new meaning will appear. What can be said at the moment, therefore, is subject to correction and expansion when their material shall be printed.

As early as 1888, Dr. William H. Holmes studied the

[1] The word *symbolism* is here used in its broader rather than in its technical sense. A brief discussion of the strict term may be found in Wissler's *American Indian*, with a bibliography covering points of controversy.

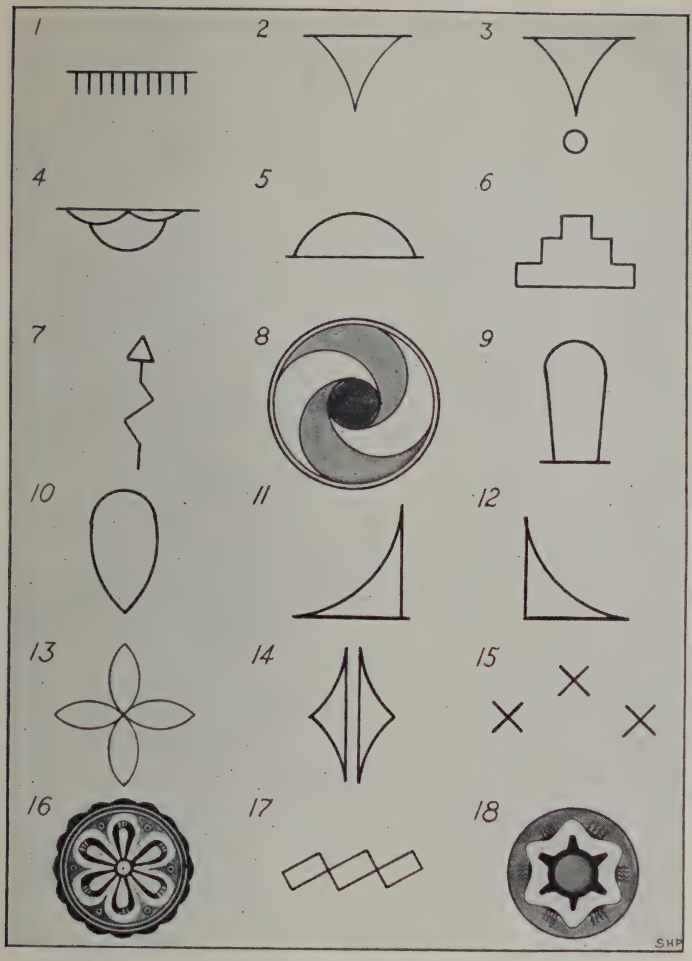
relation of the textile arts, weaving and basketry, to form and ornament, showing that they were the first arts in the field and that they abounded in decorative elements. By them the mind of the weaver was schooled to order, uniformity, and symmetry. The character of the design was limited, however, by the materials employed, and for ages perhaps to angles and geometrical combinations. No branch of art, he thought, called so constantly for the exercise of taste as this and probably none contributed so greatly to the purely geometric phases of decorative art.

Weaving, as we have said elsewhere, was at first a domestic necessity merely, but shortly crude efforts to make decorative designs on primitive basketry appear; something in the mind or emotions of the maker demanded expressive satisfaction. The Indian sculptor or painter could freely portray on cave walls the figures of animals and men in action, but the basket-maker was limited to angular designs in the weaving of utensils. Thus very early geometric figures on baskets became associated with ideas — symbolic or otherwise — a process which we now call conventionalization. The artist, wishing to represent mythological subjects or to imitate what she saw about her, was compelled to distort the form of bird or insect or human being, to fit her materials and the shape of the vessel. Examples of this process may be found in the coiled plaques of the Hopis at Oraibi, on which birds, the whirlwind, and kachina personages are conventionally represented. It is evident that the depiction of woven life forms would vary according to the kind of weaving, the form of the object, the shape of the space occupied, as well as with the traditional style of treatment and the skill of the artist. Pottery-making, being like weaving a vessel-making art, naturally took over the great body of its decorative

motives from the textile arts and even to this day the influence of textile conventions is apparent. These borrowed decorations, says Holmes, are generally quite as consistent and appropriate as if developed with the art itself. Later, the potter escaped in a measure from their limitations and elaborated his designs with more freedom, though still governed subconsciously by ancient and instinctive procedure.

Fewkes points out that an examination of many varied prehistoric specimens of pueblo artifacts shows that certain symbols were common to the arts of all of them and that others were peculiar to individual pueblos. Historically, the pueblos were derived from many clans from different localities, and since the woman carried the clan blood and was at the same time the basket- and pottery-maker, the designs which have survived are largely the product of her hand and mind. Men invented and passed on the mythology of the tribe, but women wrote it down in symbols on their handicrafts which became the traditional heritage of all. This accounts not only for their wide distribution, but for the continuity of certain elements.

At the time the Spaniards came, says Kenneth M. Chapman, the foremost authority on Southwest pottery, the following symbols were in use: serpent-lightning, anthropomorphic deities, corn grains and corn plants, clouds, mountains, falling rain, stars, and the awanyu bird. On the oldest specimens of San Ildefonso ware he has identified these conventional symbols: semicircles (the shape of the rainbow) signifying clouds; the triangle as rain falling afar off; terraces representing far mountain horizons or clouds; feathers expressing ceremonial prayers; seed pods, seeds, and leaves associated with fertility; wing motives denoting the power of flight; dots meaning a variety of things — seeds, raindrops, etc.—



ELEMENTS OF DESIGN FREQUENTLY USED BY THE SOUTHWEST INDIANS

1, falling rain; 2, far-off falling rain; 3, rain falling through the roof and making spot on the floor; 4, clouds; 5, a single cloud; 6, a mountain; left half of this sometimes used to denote a kiva; 7, lightning — snake — male arrow; 8, whirlwind used in basketry; 9, feather; if tip is black it is a Hopi feather; 10, seed; 11, a hill (San Ildefonso); 12, the moon; 13, flower; 14, leaf; 15, stars used on inside of ceremonial bowls; 16, squash rosette characteristic of Zuñi pottery with falling rain inside petals and cloud rim. The six leaves may refer to the six directions; 17, beads; 18, Pima design for the sun with rays.

according to association with other symbols; the whirlwind or scroll, represented in Navajo mythology by an important personage, the Wind God, signifying the storm wind, as in Figure 8 of accompanying illustration.

Since all life in the arid regions depended on water, the symbols for rainfall, water, storm, rivers, pools, are the most ancient and the most abundant. Water symbols 1–7 contain three very common elements — straight lines falling from a band denoting rain, semicircles piled up denoting clouds, snakes with arrow-pointed heads denoting lightning; the combination of the three signifying thunderstorm. Seeds (Figure 10) and flowers (Figure 13) combine with cloud semicircles and decorative leaf forms, tendrils, triangles — these together expressing growth, rain near by, and rain falling afar off, or, as an Indian might say, 'rain for other people.' Figure 6, the terrace steps motive, so frequently used, is an example of the way in which the constraint of basketry produced a rectangular symbol in lieu of the semicircles for clouds so often found on pottery.

Certain living forms were constantly associated with water and rainfall and therefore became their symbols. Frank Cushing, the earliest student of Zuñi arts, explains their frequency by the fact that all pools are the result of rainfall. The tadpole frequents them in spring time, the dragon-fly hovers over them in summer, the frog later matures in them. Hovering butterflies and migratory birds 'bring the summer' and are used to express its warmth and beneficence. 'The butterfly is just as fond of water as the duck,' thinks the Hopi Indian, and thus his butterfly and bird pictures excel all other representations of these motives on pottery.

From the study of prehistoric art, Fewkes deduces the principle that the Indian artist depicted predominating power rather than reality. This explains what may seem

to be anomalies in the conventions relating to animal drawings:

When a prehistoric pueblo artist drew a figure of an animal on pottery he gave prime attention to the predominating power which he attached to that animal. He thus endeavored to give an impression of action or pictorially indicate what the animal could do. Representation of action is thus one of the main characteristics of prehistoric Hopi art. The power of flight of the bird made a strong impression on the ancient Hopi and the wing and the feather were adopted as the best possible symbols of flight. . . . Not only every bird but likewise a flying snake or dragon must, in this conception, have some representation of wings or feathers; even in insects it is impossible to separate the idea of flight symbolized by the feather from the animal depicted . . . the antelope constantly has the heart depicted in symbols for it has 'good wind' and proper heart action is associated in the primitive mind with endurance in running.

From time immemorial feathers have been used as decorative objects among all peoples. Among those of the Southwest they were used in the headdress, for the sacred Snake-Whip, and particularly on prayer offerings.

Feathers are among the most important objects employed in Pueblo ceremonies, and among the modern Hopi feathers of different birds are regarded as efficacious for different specific purposes. Thus the turkey feather symbol is efficacious to bring rain and the hawk and eagle feathers are potent in war. . . . Belief in a difference in the magic power of certain feathers was deeply rooted in the primitive mind and was regarded as of great importance by the ancient as well as the modern Hopi. . . . In modern Hopi symbols the sun is a disk with representations of eagle feathers around the periphery and radial lines at each quadrant, symbolic of the sun's rays . . . feathers and terraces are the most ancient symbols at Sikyatki.

On many baskets and on almost every piece of pottery made by the women of the Southwest may be seen an

open line, variously referred to as 'the ceremonial space,' 'the exit of life and being,' 'the traditional gap,' or 'the line of life.' This craft convention goes back to the primitive idea that an animate spirit belonged to every object in nature. Cushing was told that a pot was a 'Made Being,' that the woman who moulded it gave it a personal existence. He explains the Indian point of view as follows:

> The noise made by a pot when struck or when simmering on the fire is supposed to be the voice of its associated being. The clang of the pot when it breaks or suddenly cracks in burning is the cry of this being as it escapes or separates from the vessel. . . . This vague existence never cries out violently, unprovoked; but it is supposed to do so . . . by imitation; hence no one sings, whistles or makes other strange or musical sounds resembling those of earthenware . . . during the smoothing, polishing, painting, or other processes of finishing. The being thus incited, they think, would surely strive to come out, and would break the vessel in so doing. . . . Water contains the source of life. The vessel holds the water, hence its dwelling place is in the vessel with the water . . . the vessel is supposed to contain the treasured source . . . as do wells and springs. . . . If the encircling lines inside the eating bowl or outside of the water jar, were closed, there would be no exit trail for this invisible source of life or for its influence or breath.

Mrs. Stevenson observed at Zuñi that a small piece of wafer bread was deposited in each bowl 'so that the spirit of the vase might be fed with the spiritual essence of the bread.'

Elsewhere the fact has been mentioned that Nampeyó the Hopi potter, while firing her wares, talks to their spirits, imploring them to be good and not destroy her handiwork by attempting to escape. On the wedding basket used by the Navajos the open line, which always runs from center to circumference, is intended to give exit to all evil beings that may menace the participants.

The 'visible heart' of deer or antelope, interpreted by Fewkes to signify 'good wind,' the power of the animal, is thought by Cushing to be the trail of the breath of life. He calls attention to the fact that this is not simply a line drawn from the mouth to the heart, but is a little space left down the center or on either side of a line, indicating symbolically the entrance and the exit of the source of being.

But however carefully these designs and conventions may be studied, the individuality of the human beings who made them must not be forgotten. As in the instance just cited, the visible heart may mean different things to different pueblos. Moreover, it seems probable that, as conventional figures from age to age became modified in use, they became obscure and might lose the original signification. This would inevitably lead to the invention of new interpretations. Unquestionably, in many cases, they have now become mere imitative decorations, no longer regarded as sacred emblems even by the Indians.

Nor must we overlook the fact that, since baskets and pottery have come to be made for sale as well as for home and ceremonial uses, the reverent Indian distinguishes between designs which may be laid on any vessel and others which are to be used only upon ceremonial pieces, such as prayer meal bowls, medicine baskets, altar and fetish decorations. Chapman, in studying the pottery of Santo Domingo, finds the artists extremely conservative. They use decorative geometric motives on ware for sale, reserving sacred symbols, such as terraces, clouds, stars, insects, associated with rain, etc., for objects to be used in ceremonies. On commercial pieces, the tradition of the open space is now often violated.

Several other elements found commonly on modern Indian handicrafts are certainly of prehistoric origin.

The swastika, a Greek cross with the ends of the arms all bent in the same direction, is one of the most ancient found, not only in the Southwest, but in Mexico and in the Orient. It is primarily associated with the cardinal points, the four winds, and the four directions, in Indian decoration.

The snake, ages ago, became identified with zig-zag lightning and thus by implication with rainfall. Because it is a mysterious creature and disappears in the ground, it came to be in mythology the messenger between men and the spirits of the Underworld; and as such is venerated rather than feared by the Pueblos. Mrs. Sedgwick, discussing the religious beliefs of the people of Acoma, says:

> The continuous movement of the serpent, whether slow or swift, without any visible aid to locomotion, would strike the primitive man as especially mysterious; add to this the power of hypnosis, its immortality achieved through the annual shedding of its skin, and lastly, a death-dealing sting, and we see reason enough why savages should regard a creature thus endowed with gifts he has not, with such awe and fear as would lead to an intense desire to propitiate the occult power. . . . Since the lightning (like the serpent) may kill instantaneously . . . there is another logical association of ideas between them.

The number four is sacred among most of the peoples of the American Continent. It is to be supposed that it originated from the four cardinal points and with the winds which were presumed to be the spirits that brought about changes of weather and seasons. Mrs. Sedgwick enumerates a variety of instances of its use:

> In Pueblo mythology there are four houses or stages of emergence for all living things from nothingness into the world of sense.
>
> There are four primordial creators of life.
>
> Four festivals are annually celebrated, at each of which four priests officiate.

Four times each day prayers are offered to the gods.
After a birth, the mother lies in for four days.
To each of the cardinal points an arrow is shot at baptism.
For four days after death, food is placed upon the grave.
Mourning lasts from four days to four weeks, or even four years.
Smoke is offered in four directions and most ceremonial acts are repeated in sets of fours.

When all is said by those who know something of the meaning of Indian sacred and decorative symbols, it may be summarized in two main ideas: desire for rain and belief in the unity of all life. If it be assumed that the modern Indian craftsman may have forgotten the original significance of the motives used, they are nevertheless subconsciously expressive of belief in an animate universe and the possibility of influencing the Powers, great and small, by means of art. Prayers against drought are the ultimate meaning of the endless profusion of symbols of mountains, clouds, lightning, rain, leaves, flowers, and seed pods, and fantastic forms of birds or feathers to bear these prayers aloft.

The Indian mind is not literal, specific, scientific — it is philosophical, vague, and poetic. What an Indian sees in these symbols is the mask of his simple beliefs. The symbols are his vocabulary by which he communicates his desires to the Invisibles who may help him to fulfill them. And so it happens that each tribe, perhaps even each individual, shades the meanings of this common symbolic vocabulary to express his personal aspiration. He venerates them because they are old, and beautiful and serviceable with the Powers Above and Around. He conventionalizes them to fit the world in which he must live. But he cannot make them articulate to the literal white person because they express emotions and thoughts which are spiritual and incapable of expression in the limited foreign terms he knows.

PART IV
CEREMONIES AND SONG

On festival days these plazas throb with the drum beat, with the flare and flicker of color, with the rhythmic cadence of chanted song, while a native dance drama expresses in symbolic pageantry a people's prayer . . . a racial concept of man's relation to the cosmic forces . . . a ceremonial expression of tribal religion. To us who have separated life and art and made art professional, the solemn concentration of a whole village praying in pageant is a revelation of unselfconscious intensity.

NATALIE CURTIS BURLIN

The summer and winter ceremonials of the Pueblo Indians are seasonal dramas that accompany the movements of the sun. The life of the Indian was ordered to a great extent in conformity to the changing seasons. He observed that the sun, both to the east and the west, reached a point in the south beyond which it never traveled, and from which it commenced its return to the north. In due time the return of the sun dispelled the cold of winter and brought warmth and life back to the earth. The beginning of the New Year to the Indian was the first day of spring, when the new life from Mother Earth commenced to manifest itself. Then was the time for the planting of seed for the food crops, always accompanied by the dramatization of planting, germination, rain and growth. Likewise, it was mating time and ceremonies of fructification took place in the spring.

As the sun proceeded in its northward progress, the plants grew and approached maturity with appropriate growth, fertilization and maturation ceremonies. . . . Later on, the fervent rain prayers of the summer gave way to the no less fervent ceremonies of gratitude for the abundance which meant life to the tribe. After the harvest, which was always closed by appropriate celebrations, the thoughts of the Indians turned to the next great enterprise necessary to assure their subsistence, the Hunt; the animal ceremonies of fall and winter, like the rain and cloud ceremonies of the summer are directed by the idea of the intimate relationship of the people to all living things. Therefore the Hunting Dance . . . has a far greater significance than is implied by the name it bears.

EDGAR LEE HEWETT

CHAPTER XIV

THE SIGNIFICANCE OF THE PUEBLO CEREMONIES

THERE is always a veil of mystery between the Indian and the white man and nowhere does it cloud the understanding more than in matters of ceremonial and religion. The intrusive and irreverent alien will be allowed to see as little as possible of these things by the Pueblos; but those who approach with respect and intelligence are sometimes privileged to see and to have explained to them, as much as the friendly Indian is able to convey, and the white is prepared to comprehend.

Increasing travel throughout the Southwest from April to October now ensures an audience for almost any public ceremonial in any village. But unfortunately, the ignorance and the rudeness of the few create resentment in the minds of thoughtful Indians, who cannot tolerate the noise and ridicule and irreverent behavior often displayed toward their sacred festivals and prayers. The Indians have for centuries inculcated in their children ideas of sacredness and secrecy toward these rites. The traditional objection to the presence of white people, which was probably originally associated with the Spanish occupation and the interference of the Spanish Fathers with the ceremonies, has recently been intensified by attempts at interference by certain missionaries and even by Government authorities.

The traveler hears these performances spoken of inaccurately as 'dances,' but what he sees is the dramatic culmination of a ceremony lasting from one to nine days, most of which has been private. They are, in fact, the

public and final portion of formal rituals belonging either to the tribe or to certain societies. All of the full-length ceremonials begin with a period of preparation and personal purification by the priests; followed by secret rituals and dramas in the kiva; coming to their climax on the ninth day and ending with a feast. The greater part of the preparatory days is spent in the kiva by the members of the orders or fraternities whose duty it is to perform the ritual, in preparing the paraphernalia, and in fasting, chanting, and prayer. The kiva during this time is closed to all persons not taking part, and the rhythmic muffled beat of the drums, the rise and fall of chanting voices of priests and performers, may be heard at intervals.

The ceremonies are of varying length, importance, and solemnity. Each nine-day ceremony is part of a series in an established traditional order, appropriate to the season of the year. Spring or planting rituals are followed by summer or fertilization and growing ceremonies; the autumn, with harvest and hunting festivals, and the winter with the Shalako or New Fire and initiation rituals.

In general, the more elaborate ceremonies are a period of intense concentration of the whole community upon prayers for rain, for bountiful harvest, and for the creation of life. Among the Hopis there are many minor performances, such as the kachinas of early summer, and others of a social nature, which last a day or two only. The medicine men or the shaman and certain healing societies may set a special ceremony for the cure of sickness; and there are, besides, many individual rites connected with birth, marriage, and death, and with adolescence and initiation into fraternities.

All of these are difficult to comprehend unless they are regarded as the ritualistic expression of the religious

beliefs and mythology on which they are founded. Doubtless these invocations originated in primitive times as a result of the struggle for existence. The Indian, continually combating an uncertain rainfall which limited his crops and the game supply, and often attacked by predatory tribes, lived in a state of constant fear and must have been driven to speculate on the natural and supernatural powers which produced these conditions and whose favor he must have in order to live. Dr. Edgar Lee Hewett thus explains it:

> The Indian thinks of every force and every element as under the control of deific power. Rain will fall, wind will blow, when the gods will it — and every element that touches the welfare of man depends upon some mighty power for control. Hence, man must ally himself with the deities that control the elements. He must by invocation, by offerings, commend himself to the favor of the gods. It was natural in the arid deserts of the Southwest, where man could gain subsistence mainly from the soil, that elaborate rain and growth ceremonies should develop.
>
> In the Rio Grande Valley another factor and a vital one was the protecting of the food supply from enemies. Sedentary agricultural people were always subject to the raids of predatory tribes. . . . Navajo, Comanche and Apache and other nomadic tribes were the enemies of the Pueblos. Waiting till the crops were ready to harvest they swept into the Rio Grande Valley depriving the peaceful Pueblos of their corn in the field or in storage for the winter.

Running through all these ceremonies is the accumulated lore of ages — embedded in prayers, rites, and songs that seem to reflect the primitive worship of the sun, of certain animals and plants, and of ancestors. The design of mask and prayer stick (*bajo*), the furnishings of the kiva for ceremonial usage, the paraphernalia suitable to each performance, all have an esoteric significance, lost, perhaps, to some degree, but none the

less revered. To the Indian these have the sanctity attributed by us to the articles used in the Christian churches for the sacrament or the mass.

Throughout the pueblo ritual runs the idea of duality. The people of the village are divided into summer and winter people, or may be called 'squash' and 'turquoise,' or 'yellow' and 'blue'; and at Taos, for instance, they live in separate house blocks and perform the summer and winter ceremonies of which they have the responsibility. Each has a religious head, a cacique, who is appointed for life by the Fathers of the Town Council.

He has had a long preparation for his arduous office and devotes his life to fasting, prayer, and supervision of the ceremonies. Because he is the mediator with the Powers Above, his social influence is great, and in return for his public services, the townsmen work his land and harvest his crops. His assistants are young men in training to be his possible successor. As the head of all the ceremonial groups, it is his duty to watch the sun in advance of the solstices, determine the dates for the important ceremonies, and conduct them.

In each pueblo there are societies and brotherhoods whose members have learned the appropriate prayers. songs, and rites to be used for rain-bringing and for healing. In ancient times the most important of these were concerned with success in war or hunting. Each has its own kiva and priest and owns its traditional secret rituals.

The accessories to the ceremonial life are many and significant. In secluded places near all the villages there are ancient shrines, sometimes holding an image, a fetish, or sacred meal, and offerings of feathered prayer sticks or pine wreaths. The people make long journeys to certain of these holy places to obtain blessed water.

Dr. Dorsey describes the placing of symbols of corn ears at one of these shrines:

> The priest, taking the bajos in his hand, holds them in front of his face, while he offers a silent prayer, then reverently deposits them. He takes the pinch of meal, upon which he breathes a prayer, and casts a portion of it upon the bajos and then a pinch to the north, to the west, to the south, and to the east, to the above and to the below, and then returns to the kiva.

At the major ceremonies temporary altars are set up in the plaza, where sacred objects are displayed and a sand painting or mosaic has been made. The important feature of this altar is the 'tiponi' or insignia of the society. At Oraibi, at the Flute Ceremony, the tiponi was of cylindrical shape, about eight inches in height and wrapped throughout its length with cotton thread; within was concealed an ear of corn encircled by tall feathers of brilliant plumage. Slabs bearing symbols of rain, clouds, and lightning, a medicine bowl bearing terraced rain-cloud symbols and surrounded by six ears of corn of different colors; jugs of water, a basket tray containing sacred meal, a roarer or whizzer which produces a sound like thunder, and various smaller articles, compose the altar known as 'the Six Directions' altar and designed to be an appeal for rain.

Prayer sticks having feathers and cornhusks containing honey and sacred meal, tied to them with ceremonial cotton, are placed at the shrines and at the springs. The feathers of the eagle, a sacred bird, and of the turkey, only less reverenced, are used for making ceremonial articles, and these birds are still to be seen in captivity, their plumage rather ragged from having been frequently plucked to make 'breath-feathers' and bajos. The Indian mythology explains that the markings on the tall feathers of the turkey were caused by the ancient deluge

and these feathers are therefore efficacious in bringing rain. The Hopis occasionally go on ceremonial rabbit hunts to obtain meat for the turkeys.

When candidates are admitted to the fraternities by initiatory rites, a sand painting is generally laid before the altar in the kiva. No two mosaics are alike, and the design for each is carried in the memory of the officiating priest. The painting is made from a variety of native sands and ground rocks of brilliant colors. Dark-tinted sand, smoothly laid on the ground, forms the background on which a precise design is worked out in different tints. The effect is much the same as if a symbol were laid out in pastel-tinted chalks and as precise as if measured with draftsman's instruments.[1]

The costumes of each ceremonial are prescribed by the traditions of the society performing it and probably vary little from those worn in ancient times. From the standpoint of art, the designs of clothing and accessories are very beautiful. The masks worn in winter ceremonies serve to intensify the idea of the presence of supernatural beings or mythological animals. The colors used and the designs carved or painted on them were always symbolic and correspond to the mythology of the pueblos. The Hopis make their masks of leather, cloth, or basketry, and ornament them with bark, wood, hair, feathers, and green sprays of spruce, which may afterward be laid on a shrine.

The ceremonies may be roughly divided into two general groups: the elaborate, nine-day ceremonies which in fact occupy sixteen days altogether; and the abbreviated ceremonies, beginning with the kachinas of the spring months, and the social dances, from which many details are omitted. The major rituals are long, intricate, solemn. No clowns or kachinas appear, altars

[1] See Chapter XII, on 'Painting.'

and sand paintings must be made, the tiponi or insignia of the society must be publicly displayed, many bajos are prepared and deposited on the shrines, and there is usually a ceremonial race in the early morning of the final and public day. These full and complicated affairs occur for the most part in fall and winter when the performers have time to carry them out.

CHAPTER XV

CEREMONIAL CALENDAR — ARIZONA PUEBLOS [1]

Among the Hopis the ceremonies are more highly developed and more numerous and varied than among the Rio Grande Pueblos. Every able-bodied Hopi takes part in one or more of the major ceremonies and in several of the minor ones. The nine-day rituals have a fixed order and succeed each other according to the lunar months and the purpose of the performance. The lunar months do not precisely correspond to our calendar and, since the Cacique fixes the day, the final public drama may vary in date somewhat from year to year. The Cacique fixes the dates by the solstices, and therefore the beginning of the series is logically with December, when the sun has gone farthest from the Indian country.

December . . *Soyaluna*, winter solstice, in which warrior societies are prominent, rituals elaborate, public dance simple. Masks are worn.

January . . . . *Buffalo* Dance. Kachinas return, representing animals. Masks are worn.

February . . . *Powamu*, 'bean sprouting' and initiation ceremonies, very elaborate, signifying consecration of fields for planting. Masks are worn.

March . . . . . *Palululong*, 'Great Plumed Serpent,' a mystery play. Masks.

April, May, June . . . . . *Kachinas*, abbreviated ceremonies, social and religious, in which masked figures impersonate supernatural beings and spirits of ancestors. These vary from year to year and are often very joyous. Masks.

[1] Of the writers whose descriptions are authoritative, the most important are, J. W. Fewkes, G. A. Dorsey, Walter Hough, and E. L. Hewett.

August.....*Snake* and *Antelope* Ceremonies, alternating with the *Flute* Ceremony. In even-numbered years the Snake ceremony is given in western Hopi villages, while the Flute Ceremony is being given in the eastern villages; in odd years, *vice versa*.

September..*Lagon*, women's Basket Dance, given in even-numbered years in five Hopi villages, by the Lalakonti Society.

October....*Marau* and *Ooqöl*, women's Basket Dances, given in odd-numbered years. Harvest and Tablet Dances.

November..*Wuwucimti* (New Fire) Ceremony, prayers to the germ god, the earth and fire gods; four fraternities take part and the public portion is unusually interesting. Every fourth year initiation ceremonies are added.

SOLALUNA (after Hough and Dorsey):

When the faint winter sun descends into his 'south house,' which is a notch in the Elden Mesa near Flagstaff, the people of the Hopi villages, as in our holiday season, exchange greetings and make presents of nakwakwoshi, consisting of a downy eagle feather and long pine needles tied to a cotton string. The leaders of the Soyaluna ceremony are the Soyal priests, a War chief, a Hawk or Thunderbird man and other personages, and all the fraternities of the villages are supposed to coöperate by preparing the sacred bajos and paraphernalia.

In the principal kiva the customary elaborate ritual is conducted for nine days. At one end of the kiva is placed the altar decorated with bunches of grass and hundreds of gaudily painted artificial flowers. On the top are bows covered with cotton representing snow clouds. Before the altar is a pile of corn laid up like a wall, which has been collected in the village, to be returned filled with fertility after the ceremony. In front of the corn wall is a ridge of sand on which are set corn fetiches of stone and wood. The medicine bowl and many pipes, feather-prayer-sticks, etc., are in position on the floor.

The secret performances held on the fourth and fifth days, are very interesting. After the singing of traditional songs ac-

companied by rattles, flutes, whistles and bull-roarers, and interspersed with prayers, there is an initiation of novices. Then enters the first bird-man elaborately costumed, followed by the second bird-man and the Soyaluna maid who perform a strange dance; then appears Eototo the forerunner of the kachinas, bearing corn.

A mimic conflict ensues between the Thunderbird men, leading the members of the other kivas, and the Soyal shield-bearer, representing the War god. With wild dramatic action they thrust their shields against the sun-shield as in deadly combat, but the shield-bearer forces them back and vanquishes them in turn.

On the ninth and final evening a man enters the kiva dressed in beautiful ceremonial garments, and wearing over his forehead a large four-pointed star. In his hand he carries a large sun-symbol supported on the end of a wooden shaft. During the singing by the priests seated around the altar, this star-god dances with an exceedingly rapid movement from one side to the other, twirling the sun symbol rapidly in front, always keeping time with his body and arms.

This seems to represent the climax of the ceremony which not only celebrates the winter solstice, but which has as its special object the driving of the sun into his northward path, so that he may bring life back to the Hopi.

Buffalo Dance (after Hewett):

This is the most important of the winter ceremonies of the Pueblos, and is still performed in almost every one of the villages. It is a dramatization of the supposed relation between the people and the larger animal life about them, especially the animals which furnish the winter food for the people. It takes the name 'Buffalo Dance' not because that is the only food animal celebrated in the ceremony, but on account of its having been the principal source of animal food supply. The dancers are masked as buffalo, elk, antelope, in some cases mountain sheep, these being the principal game animals of the region surrounding the ancient Pueblo lands. The procession is led by a man costumed as a hunter. The dancers are usually in two lines, and between the two is seen a woman called the Buffalo Mother. She is the symbolic mother of the larger animal life of the region. A buffalo hunt

to the great plains was a regular organized ceremony. No individual could hunt independently, and severe penalties were inflicted for any violation of the rules of the community hunt. Animals were never killed needlessly, and practically no part of the animals killed in the hunt was wasted.

The Powamu Ceremony of the Hopis, which takes place in February, signifies the consecration of the fields for the planting season and one of its chief features is the sprouting of beans in the kivas and the distribution of the sprouts to various persons. At this time also youthful candidates are initiated, the kachinas flogging them severely with yucca switches. The kivas are replastered and, according to Dr. Fewkes, the idea of renovation and purification underlies all the rites. These, both private and public, are far more striking than those connected with the Snake and Antelope Ceremonies of August. Dr. Dorsey has said that 'in no part of the world could one see in nine days such a wealth of ceremony, such a pantheon of gods, represented by men masked and otherwise appropriately costumed, such elaborate altars and beautiful sand mosaics, or songs and speeches so archaic and ancient.'

In the kiva a costumed priest, representing the God of Germs, recites the myth of the Powamu and relates the wanderings of certain clans and their arrival in Tusayan. At the final, public performance many kachinas appear, roaming about the village, distributing bean sprouts, furnishing fun, and frightening the children. At the evening feast on the ninth day the bean sprouts, which have been ceremonially grown, are eaten.

The Palulukong Ceremony of March is a drama of the Great Plumed Serpent, a creature which appears in the mythology of many American tribes. The actors are masked and the kiva serves as a theater. Few white persons have been permitted to see this mystery play, but

Dr. Walter Hough has given a vivid description of what he saw:

In the middle of the kiva two old chiefs sit around the fire, which they feed with small twigs of greasewood to produce an uncertain flickering light . . . strange cries from without the kiva, and a ball of corn meal thrown down the hatchway, is answered by invitations to enter. The fire is darkened by a blanket held over it, and the actors climb down the ladder and arrange their properties. The firetenders drop the blankets and on the floor is seen a miniature field of corn made by fastening sprouted corn in clay pedestals. Behind this field of corn is a screen . . . decorated with figures of human beings, corn, clouds, lightning, etc., and along the screen, six openings masked by flaps. On either side of the screen stand several masked men, one dressed as a woman holding a basket tray of meal and an ear of corn.

A song begins and the actors dance to the music. The hoarse roar of a gourd horn resounds through the kiva, and instantly the flaps in the screen are drawn up and the heads of grotesque serpents with goggle eyes, feather crest, horn, fierce teeth, and red tongue, appear in the six openings. Farther and farther they seem to thrust themselves out, until four feet of the painted body can be seen. Then as the song grows louder the plumed snakes sway in time to the music, biting at each other and darting toward the actors. Suddenly they bend down and sweep the imitation cornfield into a confused heap, then raise their waggling heads as before, and it is seen that the central serpent has udders and suckles the others. Amid the roars of the horn and great excitement, offerings of meal and prayers are made to the plumed serpents. . . . The spectacle is dismantled and the actors file out.

This act constitutes merely the first of a series of which the sixth is even more remarkable:

Back of the field of corn on the floor are seen two large pottery vases, and as if by magic, the covers of the vases fly back, and from them two serpents emerge, swoop down and overthrow the cornhills, struggle with each other . . . and then withdraw into the vases. In the dim light of the kiva fire

BÁCABI DANCERS AT THE END OF THE NIMAN CEREMONIAL

the cords by which the serpents are manipulated cannot be seen, and the realism of the act is wonderful. In other years the acts are even more startling, as when masked men wrestle with serpents which try to coil about their victims. The actor thrusts one arm in the body of the snake in order to give these movements, while a false arm is tied to his shoulder.

The KACHINAS (Kat'sina), who take the stage in April, May, and June, are masked men impersonating the spirits of ancestors, whose function is to bring rain, that is, prosperity, to their kinsmen on earth. The term is also applied to any dance in which they take part and to the figurines carved in imitation of them. These dolls are not venerated, but are prepared as gifts for children particularly at the end of Niman, when the Kachinas take farewell. The Kachina spirits are believed to come from the San Francisco Mountains or from certain places along the Rio Grande, and they are the friendly guardians of the Hopis and intercessors for them with the gods of fertility.

They begin to come at the Soyaluna in December and continue to arrive until Niman, in July. More than any other feature of Hopi life they express fun and jollity. They are a form of masquerading, in which the villagers vie with each other to invent new costumes, to represent the characters of their mythology, entertain their visitors, and express their native sociability. The spontaneity of these festivals is in great contrast to the lengthy solemnities of the fall and winter ceremonies.

The symbol of the particular Kachina to be presented is shown on the helmet, which is repainted at each representation. But other than this there is a prescribed dress for all of them. The body, save for the kilt, is uncovered. The kilt is white or green in color, with embroidered rain-cloud symbols. This is tied with a sash with fox-skin hanging behind. Rattles made of turtle

shell and sheep and antelope hoofs are tied to one leg back of the knee and moccasins are ordinarily worn. Spruce twigs are inserted in the girdle, and the performer carries a rattle in one hand, made of a gourd-shell containing pebbles.

The Kachinas, as compared with the earlier ceremonies of the year, are much abbreviated as to secret ritual and dispense almost wholly with altars and bajo making. They invariably end with a feast.

In July occurs the NIMAN, or Farewell Ceremony of the Kachinas, who are about to return to the Underworld. After eight days of kiva rites, which are similar to those of the other major ceremonies, the one-day public spectacle is especially striking. The costumes are rich, the dance figures involved and repetitious, many gifts of fruit are given to the children along with bows, arrows, and dolls, and at the end the dancers go to a shrine to leave their offerings.

CHAPTER XVI

THE SNAKE CEREMONY

THE Snake Ceremonial, one of the most archaic rites among the Pueblos, was probably widespread in the Southwest, but is now given biennially, alternating with the Flute Ceremony, in only a few Hopi villages. It once had a sanctity and mystery which it is gradually losing with the coming of white men and the invasion of summer tourists. Many accounts of the public portion of it have been written, but few persons, and these chiefly scientists, have seen the whole of the kiva rites or have been trusted by the Indians with the inner significance of the prayers and ritual.

In 1913, the writer was present at the ceremony at Walpi, the Hopi village at which the ceremony is generally seen to the best advantage. At that period the number of strangers attending was small, and they came on horseback and in wagons, camping at the spring below the mesa, on the day before the final and public part of the ceremony.

Just before sunset we climbed from our camp to the top of the mesa and for a brief hour absorbed that atmosphere of ineffable quiet which lies at nightfall upon the desert and the far mauve and blue mountain rim. Only the sound of a sleepy fowl or a whimpering child, the faint moccasined footfalls of passing villagers and the ticktack of burros pattering up the rocky trail broke the stillness. The snowy thunderheads, which had been piling up all the afternoon, turned rosy and paused before the setting sun.

As the moments passed, little black figures appeared

on the desert — naked, trotting along wearily with a pouch of snakes at the thigh and a prayer plume in the hand, they mounted the trail, bringing the last of their capture to be used on the morrow. Each priest paused at the top of the mesa, turned his face to the west, and made his obeisance to the Sun, the giver of life and fertility; then vanished into the kiva. The twilight fell as if the Divine Hand had swiftly drawn a curtain over these primitive devotions.

During the night, the sound of noisy white people stuck in the sand hills or in the wash below, or making camp and bellowing trivialities at each other, broke in upon the muffled beating of drums and the faint chanting within the kivas. With daylight the pueblo was suddenly alive with Indians preparing for the morning race with which the last day's climax has always begun.

The ceremony is given jointly by the Antelope and the Snake Fraternities. The former are concerned chiefly with the rites in the kiva, while the latter, originally a warrior society, gather and handle the snakes. After the precise date in August has been set by some secret formula of the priests, the town crier announces it from the housetop and a courier is sent out with the news. Each of the nine ceremonial days has secret traditional rites, culminating in the Antelope Race on the eighth morning, the Snake Society Race on the ninth morning, and the final joint public ceremony of the snake handling on the ninth afternoon.

On the first day, the *natsi*, or standard of two eagle feathers, is set up on the hatchway of the kivas to announce the beginning of the rites below, which consist of the making of bajos and ceremonial smoking. On the second day the Snake priests go out in pairs to hunt snakes, provided with digging-sticks, snake whips of

feathers, and pouches of buckskin. They follow the usual ceremonial circuit of the Hopis — north, west, south, east — during four successive days, but if not enough snakes are found, they may search anywhere at any time. One half or more of the sixty to eighty snakes required are rattlesnakes. The remainder are racers, whip and bull snakes.

The snakes are usually found by following their trails in the dust. If a snake is lying uncoiled, a little sacred flour is thrown toward it, it is seized by the neck, stroked gently with the feather whip, and placed in a pouch. Should the snake coil, a prayer is said, and tobacco smoke blown toward it until it relaxes. If the trail of a snake leads to a hole, it is dug out with the digging-stick. At nightfall the Snake priests come wearily home, and as the sun goes down each stops at the top of the rock to make his prayer, and then deposits his snakes in pottery vessels in the kiva.

Meanwhile, each fraternity constructs an altar in its own kiva, the Antelope priests using symbols of rain-clouds, lightning, and maize in altar sand paintings. On the sixth day the rite of the Snake Youth and the Antelope Maid is begun. Very early in the morning a Snake priest brings a young man to the kiva and one of the Antelope priests brings a maiden — a relative of some member — both of whom are attired in beautiful costumes to impersonate their parts in the ancient drama. Standing at the rear of the altar, there is placed in the hand of the Maid an earthenware vessel which contains stalks of growing corn and vines of melons; in one hand of the Youth is a tiponi, the insignia of the Society, and in the other a rattlesnake. The priests smoke, blowing toward the altar, over which a specially prepared liquid is sprinkled. Many prayers are uttered and chants of great antiquity are sung. When the

seventh song is reached, the priest lights an ancient cloud-blower filled with native tobacco, and, as the priests sing their invocations to the yellow clouds of the north, to the green clouds of the west, to the red clouds of the south, and to the white clouds of the east, he forces billows of smoke from the pipe upon each of them and invokes one after the other.

On the eighth day the Antelope Society performs its early morning ceremonial race and its public dance in the afternoon, using cornstalks in place of snakes, but otherwise nearly duplicating the procedure of the Snake Dance of the following day.

At daylight on the ninth day two of the Snake priests dress as warriors. They carry a bull-roarer or whizzer made of sticks which when twirled makes a noise like falling rain; and a curious lightning-shooter of crossed sticks so joined that they may be projected and returned; and go down onto the plain a mile or two from the village. Here the messenger who brought water from a sacred spring the day before deposits prayer sticks and makes prayers at four places some distance apart. When the warrior-priests reach the fourth and farthest spot, the runners, who are already lined up for the contest, start toward the pueblo. The first one who passes the messenger is given a gourd in a net containing the water from the sacred spring, which he in turn must pass on to any runner who goes by him. As the runners approach the goal of the mesa, they are joined, on the morning of the eighth day, by the Antelope priests; and on the morning of the ninth day by the Snake priests. Naked boys, fantastically painted, follow them up the mesa trails with freshly cut cornstalks. When the runners have passed, the girls of the village snatch these stalks and carry them to the houses for decorations. The winner of the race receives as a prize

THE SNAKE DANCE AT WALPI, 1913

These are exceptionally good pictures of this interesting ceremony, photographs of which must be taken late in the afternoon and often when the sky is overcast in this region.

the gourd of water and a small ring which he buries in his field and which are to ensure a good crop.

After the morning race of the ninth day, the snakes are washed in medicine water in the Snake kiva. The excitement accompanying this ceremony, says Dr. Hough, cannot be adequately described:

> The priests assemble in the kiva and seat themselves on stone seats around the wall, holding in the hand a snake whip made of two feathers secured to a small stick. On the floor dry sand has been spread and on it stands a medicine bowl of water. The snakes have been placed near by in bags in the care of priests, and the snake washer, arrayed as a warrior, seats himself before the bowl, while back of him stand two men waving snake whips. A weird song begins, the warrior thrusts his hand into the bag and draws out a handful of snakes, plunges them into the medicine water, and drops them on the sand . . . while the priests wave their wands and sing, now low, and now loudly and vehemently. Some of the snakes try to escape but are herded on the sand field which is for the purpose of drying them.
>
> The snakes are left on the floor for a few hours before the public dance, a writhing mass, watched over by boys. These boys, barefooted and entirely naked, sit down on the stone seats and with their whips or bare hands, play with the snakes, permitting them to crawl over and under their feet . . . using them as playthings. . . . Occasionally one of the snakes being tossed to a distance, resents the insult, but before the snake has had time to coil, it will be straightened out by one of the boys or tossed back. And so the sport continues for more than two hours.

Meanwhile, during the day, a Snake priest goes abroad to bring in on his burros the cottonwood boughs with which the bower or *kisi* for the snakes is made at the side of the plaza; and those who are to take part in the final public ceremony are engaged in painting and costuming themselves. The priests are naked to the waist, their upper bodies stained with reddish brown on

which is traced in black and white the lightning symbols. The hair hangs loose with two red feathers fastened at the top of the head. The eyes are outlined in reddish stain and the mouth in white. Their kilts are of white cotton embroidered in colors. To this is added armlets, anklets, moccasins of buckskin, and tortoise-shell rattles at the knee. From the belt behind dangle one or more handsome yellow-gray fox-skins and each wears a profusion of turquoise and shell necklaces and silver ornaments. As the priests stride about, all this accouterment rattles, while the Antelope men shake their gourds, giving 'a faint but insistent noise like dried peas blown against glass' and an effect of indescribable agitation.

At last, when the sun is low in the west, the Snake Dance begins. A brief account by Dr. Walter Hough must suffice:

> The Antelope priests file out and after circling the Plaza stand in line awaiting the Snake priests, who advance with tragic strides. They circle the Plaza three times, each stamping on a plank in front of the cottonwood bower, the *kisi*, to notify the denizens of the Underworld that a ceremony in their honor is progressing. They face the Antelope chorus, the rattles tremble with a sound like the warning of the rattlesnake, and a deep, low-toned chant begins like a distant storm. The chant increases in volume, the lines sway, then undulate backward and forward, and at last in a culminating burst of the chant, the Snake men form in groups of three and dance around the Plaza with a strange step like a restrained leap. The snakes have been placed in the *kisi* in care of the passer hidden among the boughs. As the trios in succession arrive before the *kisi* the carrier drops to his knees, secures a snake which he grasps in his mouth, rises and dances around in a circular path four times, when the snake is dropped to the ground and is picked up with lightning rapidity by the third member of the trio who retains the squirming reptile in his hands.

When all the snakes have been handled, the head priest makes a large circle of corn flour, drawing six radii which represent the six world regions. Into this circle the snakes are thrown in a heap and a group of girls and women, who have been standing ready with baskets of meal, sprinkle the snakes and the dancers with it. At a given signal, the Snake priests approach, grab as many snakes out of the heap as they can hold, run down to the plain, and release them.

As soon as the ceremony is over, the priests retire to the kivas to remove their costumes and then go to the edge of the mesa for the purification rite. In this the exhausted performers take a strong emetic, followed by a sponge bath in which the wives assist. This is scarcely finished when from every house will be seen a procession of women in holiday dress, bearing baskets of food for the feast with which the ceremony always ends. Four days of games and festivities follow, and, if the ceremony has been successful in bringing abundant rain, the people are altogether happy.

Visitors, who in recent years often number thousands, are continually asking how it is that the priests are so seldom bitten, or, when bitten, do not die. It is certain that the fangs and venom sacks have not been removed from the snakes. But it must be remembered that the snakes have already been tamed, if not worn out, with several days of handling and starvation; the corn flour with which they have been sprinkled practically blinds their lidless eyes; and the priests have become very skillful in warding off attacks. If bitten, the purging which follows the ceremony is probably of some effect, but it is believed that the Indians have a snake-poison antidote which may be taken as soon as the dancer retires to the kiva. The Hopis have medicine women as well as medicine men, and the most important of these

was, according to Dr. Walter Hough, Saalako, the Mother of the Snake Priest. She brewed the dark medicine used for purification after the Snake Dance and guarded the secret of the antidotes for snake bites.

In their mythology, the primitive Indians of the Southwest associated the snake with the Powers of the Underworld from which the first human beings were supposed to have come. It was natural enough to associate the snake with lightning, whose darting motion and death-dealing stab suggest its sinuous motion; it has even been identified with the curving flow of streams. Thus long ago the snake became a part of the native symbolism, an emblem of fertility, and the messenger who carries prayers for rain to the Powers Below at the end of the ceremonial devotions.

According to Hartley Alexander, the symbolism of the Snake Dance is explained in part by the Hopi myth of the Snake Youth and Maid:[1]

A youth, a chief's son, spent his days beside the Grand Canyon, wondering where all the water flowed to and thinking that must make it very full somewhere. Finally, he embarks in a hollow log and is borne to the sea, where he is hailed by the Spider Woman, who becomes his wizardly assistant. Together they visit the kiva of the mythic Snake People, at the moment human in shape, who subject the young man to tests, which, with the aid of the Spider Woman, he successfully meets. The Snake People then assume serpentine form; at the instigation of the Spider Woman he seizes the fiercest of these, whereupon the reptile becomes a beautiful girl, who, before the transformation, had caught the youth's fancy. This is the Snake Maid whom he now marries and leads back to his own country. The first offspring of this union is a brood of serpents; but later human children are born to become the ancestors of the Snake Clan.

The Snake Ceremony is, therefore, a dramatization

[1] Vol. x, *Myths of All Races.*

of the myth in which the snakes become blood brothers of the Hopi Clan which now represents them. As enacted to-day, it is an elaborate prayer for rain. The snakes are supposed to carry prayers to the Underworld, where there is a Great Plumed Water Serpent. All the behavior of the participants, the designs of costumes, the decoration of paraphernalia, have reference to rain-bringing. And it is an uncanny fact that rain almost invariably falls on the day of the ceremony or immediately after. Since the priests set the date within the narrow limits of ten days in August, the month when it is most likely to rain in this region in Arizona, it may be surmised that ages of experience have made them good weather prophets.

At sunset the Snake Dance is ended. The crowds of the curious depart, some subdued by this touch of the primitive and mysterious, but most of them still hysterically discussing what they have seen with the eye but have not comprehended with the spirit. Automobiles, wagons, mules, horses, and people fade away on the highways. Again the Desert Hush comes over the Hopi land. The traditions are once more fulfilled, the gods must certainly be satisfied, since thunder-clouds have covered the face of Father Sky.

CHAPTER XVII

THE AUTUMN CEREMONIES — ARIZONA

The Flute Ceremony, performed by the priests of the Blue and the Drab Flute Societies in August alternately with the Snake-Antelope Ceremony, at some of the Hopi villages, is quite as interesting and even more picturesque. The priests of the Flute, indeed, think themselves more successful rain-makers than the Snake priests. A brief description by Dr. Walter Hough is given here:

On the first day the sand altar is made and at night the songs are begun. Within the kiva the interminable rites go on and daily the cycle of songs accompanied with flutes is rehearsed. A messenger clad in an embroidered kilt and anointed with honey runs with flowing hair to deposit prayer sticks at the shrines, encircling the fields in his run and coming nearer the pueblo each circuit. During the seventh and eighth days a visit is made to three important springs where ceremonies are held and on the return of the priests they are received by an assemblage of the Bear and Snake Societies, the chiefs of which challenge them and tell them that if they are good people, as they claim, they can bring rain. . . . When at 3 A.M. of the ninth morning the belt of Orion is at a certain place in the heavens the priests file into the plaza, where a cottonwood bower has been erected over the shrine called the entrance to the underworld. Here the priests sing, accompanied with flutes, the shrine is ceremonially opened and prayer sticks placed within, and they return to the kiva. At some of the pueblos there is a race up the mesa at dawn on the ninth day as in other ceremonies.

On the evening of the ninth day the Flute procession forms and winds down the trail to the spring in order: the Leader, the Snake maiden and two Snake youths, the priests, and in the rear a costumed warrior with bow and whizzer. At the

spring they sit on the north side of the pool, and as one of the priests plays the flute the others sing, while one of their number wades into the spring, dives under the water, and plants a prayer stick in the muddy bottom. Then taking a flute he again wades into the spring and sounds it in the water to the four cardinal points. Meanwhile sunflowers and cornstalks have been brought to the spring by messengers. Each priest places the sunflowers on his head and each takes two cornstalks in his hands, and the procession, two abreast, ascends the mesa. A priest draws on the trail with white corn meal a line and across it three cloud symbols. The Flute children throw the offerings they hold in their hands upon the symbols and advance, followed by the priests who sing to the sound of the flutes . . . and the same performance is repeated till they stand again in the plaza before the cottonwood bower, when they sing melodious songs and disperse.

Dr. Walter Hough describes with enthusiasm the music of the Flute Ceremony which he witnessed at the Hopi Pueblo of Walpi:

In the course of the ritual, which is an invocation for rain, a series of songs are repeated each day for several days. . . . The chorus of priests, rattle in hand, sang in unison before the Flute altar, in a narrow, low, windowless room that greatly augmented the volume of sound. The time was set by the speaker-chief, who uniformly shook his rattle eight beats in five seconds for all the songs and for each day's songs with the accuracy of a metronome. There were three beats in each measure. The pitch was low, the range limited, and the deep, vibrant voices seemed to portray the winds, thunder, rain, the rushing water and the elemental forces of nature.

The notation is chromatic, not possible to be expressed on any instrument save the violin, or the five-hole transverse flutes which later accompanied the singing. These flutes are played in unison on the octave above the voices, and their shrill, harsh notes marred the singing. In general effect the music is minor, but frequently major motives of great beauty spring out of dead-level monotonous minors. There is much slurring and an occasional reduplication comes in with great effect. . . . The closing song is spirited and may be truly

called beautiful. It consists of several legato verses, each closing with a turn, a rapid vibration of the rattle, and a solemn refrain.

A song belonging to the Gray Flute Society, translated by Natalie Curtis, as sung by two Hopi Indians for 'The Indian's Book,' is here reproduced:

Hail, Fathers, hail!
Chieftains of the Gray Flute, hail!
At the four world-points Ye call, Ye summon clouds.
From the four world-points upstarting,
Shall the rain hither come.

Hither thunder, rain-thunder here,
Hither the rain-thunder will come;
Hither rain, moving-rain —
Onward now, over all the fields,
Moving-rain.
And the wet earth, 'mid the corn,
Everywhere, far and near,
It will shine — water-shine.

The ceremonies performed by the Indian women's societies, called *Basket Dances*, are held in September and October, and are associated with the idea of fertilization and harvest, and accompanied with some crude fun. The Lagon, conducted by the Lalakonti Society, is given in the even years alternately with the Marau of the Mamzrauti Order and the Ooqöl. With the decay of Oraibi pueblo in recent times, they are less frequently given, but are unique and interesting wherever seen.

These are nine-day ceremonies and the details of the kiva rites, such as bajo-making, sand paintings, initiations, messengers, and chanting, are very similar to those of the men's ceremonies already described. On the ninth day of the Lalakonti in September, there is a race at daybreak. A maid, beautifully dressed, stands bearing a sacred plaque basket, while the runners — women

and girls — race up the trail and break through the waiting circle of priestesses in the plaza. In the afternoon, when the public dance takes place, the circle of priestesses, each carrying her basket and chanting, forms again in the plaza. The baskets, held in both hands with the concave side to the front, are slowly raised first to one breast and then to the other, and then lowered to the hips. Two girls in elaborate costume, with bundles on their backs, appear in the circle, untie the bundles, hold up a basket, exchange places back and forth, then suddenly throw their baskets high in the air. The crowd of young men onlookers struggle for the prize basket.

The Marau is a harvest ceremony, held in October of the odd years at Oraibi and is similar in some respects to the Lagon. The leaders are a chief Marau priest and priestess, a leader of the dance, and certain women dressed as men and known as *takas*. On the final day there is no dawn race, but the women, dressed in beautiful ceremonial garments, file out of the kiva into the plaza and form a large circle. Each carries in her hand a gayly painted tablet of wood on which are depicted rain-cloud and other symbols, and an ear of maize in colors. These correspond to bajos, prayer-feathers, and are waved up and down in time with the singing of the chorus. Two women dressed as men carry bows and arrows and cornhusk packets. As they advance toward the circle, they throw the packets into the air and shoot at them with the arrows. This is said to symbolize the striking of lightning in the cornfield, which, by the Hopis, is regarded as fertilization. After the dance is over, they return with trays of dumplings and throw them among the spectators.

The Ooqöl ceremony, given in the odd years, is said to have been brought from Awatobi, the Hopi pueblo

destroyed more than two hundred years ago. Its rites and its altar are elaborate and the public portion somewhat similar to the Lagon. While the priestesses perform in the circle with basket trays, two women, wearing a picturesque headdress of parrot feathers, appear, bearing in one hand a netted wheel and in the other a dart. As they approach, they roll the wheel upon the ground and attempt to pierce the center with the arrows.

The New Fire Ceremony of November is one of the most lively and at the same time complicated of all the dances of the Hopis. Every fourth year it is extended by the initiation of novices. And these altogether involve four fraternities and nearly all the men and boys of the villages either as dancers or drummers. It seems to be associated, like the October ceremonies of the women, with the idea of fertilization. It is a prayer to the Germ God for fertility of men, animals, and the soil. And with it the Hopi calendar is completed.

It was once certainly performed at Zuñi, Jemez, and the Rio Grande pueblos, says Fewkes, but has only been described fully as done at Walpi; and is to be regarded as 'Sun and germination worship.'

CHAPTER XVIII

CEREMONIAL CALENDAR — NEW MEXICO

THE dates of these ceremonials are not fixed, but in recent years have differed only slightly from the following schedule. Many of them have become identified with a particular saint's day; and some are merely fragments of much more elaborate performances similar to those given at the Hopi villages. At the Inter-Tribal Ceremonial and Fair, given late in August, the most striking of the Apache and Navajo ceremonies, in addition to those of the Pueblos, are to be seen. At the Santa Fé Fiesta and Fair in September, some ceremonies, no longer to be seen at the pueblos, have been revived; an historical Spanish pageant is presented and the artcrafts of the Indians are exhibited at the Museum of the Institute of Archæology.

January	23	San Ildefonso	Deer Dance (i.e., buffalo, deer, antelope, mountain sheep, goats). Masks.
February			
March		San Ildefonso	Bull Dance.
April			
May	1	San Felipe	Saint Philip's Day.
June	13	Sandia	Saint Anthony's Day.
June	24	San Juan	Saint John's Day — Tablita Dance.
July	14	Cochiti	Saint Bonaventure's Day — Tablita. Corn Dance.
July	26	Santa Ana	
August	2	Jemez	Mary of the Angels.
August	4	Santo Domingo	Corn Ceremony (see page 148).
August	10	Picuris	
August	12	Santa Clara	Corn Ceremony; Rain races.
August	15	Sia	Assumption of the Blessed Virgin.

August 28	Isleta	Saint Augustine's Day.
August	Gallup or Albuquerque	Inter-Tribal Dance and Fair.
September	Santa Fé	Fiesta and Southwest Indian Fair.
September 2	Acoma	Saint Stephen's Day (religious service, Indian drama, races, games).
September 4	Isleta	
September 6	San Ildefonso	
September 19	Laguna	
September 30	Taos	San Geronimo's Day.
October 4	Nambe	Saint Francis' Day.
November 12	Tesuque	San Diego's Day.
November 12	Jemez	San Diego's Day.
November 30	Zuñi	Saint Andrew's Day.
December 24	Santo Domingo	Deer Dance repeated at Church.

The ceremonies of the Rio Grande pueblos, though similar in structure and intent to those of the Hopi, differ in many details, are often abbreviated and, to some extent, overlaid with foreign ideas. They follow the old Indian calendar, based on the yearly germination, growth and maturity processes, but they add to the motives of rain-making and fertility a much greater emphasis on protection from enemies. The eastern pueblos suffered from earliest times from the attacks of the nomadic Apaches, Comanches, and Navajos. Consequently, war, eagle, and buffalo dramas are more conspicuous than in the west.

But a more fundamental change has been wrought in their character by the 'Mexicanization' of life and religion following the Spanish invasion. The Spanish conquest and colonization and the Indian revolt of the sixteenth and seventeenth centuries tore the fabric of Indian custom to pieces, scattering the tribes, destroying some of their practices, and leaving only fragments of their customary living.

The conversion to Roman Catholic forms of worship has produced a strange mixture of Indian survivals with

THE DRUMMERS OF SAN JUAN DURING A CEREMONY

APACHE DANCERS AT THE GALLUP CEREMONIAL, 1927

Christian observances. In all the Rio Grande pueblos, the traditional secret rites take place in the kivas. But before any public ceremony, the performers go to mass in the early morning, and after the Indian drama is over, they carry gifts to the shrine on the plaza, which has been prepared for the saint whose day has been identified with their ancient prayer-day for rain and fertility and protection.

The Roman Catholic priest, the lay brothers, and the nuns often lend their presence to the Indian ceremonies. At the Corn Ceremony at Santo Domingo, after the early mass, young Indian couples are married and babies baptized in the chancel, which bears the usual altar furniture surrounded with panels of Indian paintings of corn, fertility, and cloud symbols. Holy water is provided at the entrance of the church in an Indian pottery bowl decorated with the sacred water symbols. The congregation, composed of native New Mexicans, curious Navajos, visiting Pueblos, and tourists, follows the Church procession to the plaza where the Indian drama is performed.

At the smaller pueblos — as, for instance, San Felípe, Picurís, Sia, and Nambe — the Indian features of the day have all but disappeared in the typical celebration of a Mexican Fiesta and Saint's Day; but in the larger pueblos like Santo Domingo, more resistant and more conservative, the two streams of religious observance are combined while the Indian ceremonial remains dominant. At Cochití — very much Mexicanized — there survives an old Spanish mystery play, a Christmas drama of the contest between good and evil. Transplanted long ago from Old Mexico and transmuted by Indian mysticism and rhythm, it became part of the Indian ceremonies, and is identified with the celebration of the Nativity.

THE CORN CEREMONY, held at Santo Domingo annually on the 4th of August, is pronounced by Dr. Edgar Lee Hewett to be the most perfect survival of ancient religious ceremonials among the eastern pueblos. It is both a dramatization of the life history of this pueblo and a prayer for the growth and preservation of their corn.

The ceremony begins with certain Christian rites held at the Church. These are absolutely foreign to the main dance. They are a concession to the authority of the Roman Catholic Church to which most Pueblo Indians nominally adhere. . . . The first part of the ceremony is historical. Emerging from the summer kiva, you see a procession of ghostly figures — these are the Koshare. It must be understood that these characters are not clowns and are not intended to amuse. They represent the Ancients, the spirits or shades of the ancestors of the people, those who still exercise a protecting influence through their mediatory office with the gods. Those Above, is the poetic term by which such spirits are referred to. . . . The Koshare first encircle in their march, both halves of the pueblo, thus in symbolic movement throwing the protecting influence of the Ancients around the whole people.

Meeting in the sacred precinct with another procession of Koshare from the winter kiva there is a dramatic conference . . . the cause of great excitement. Immediately runners are sent out to the east, west, north and south. These are seen to disappear into the kivas or into adjacent houses and the excited conference goes on. Presently there comes running from the east the messenger. He is surrounded at once by the excited throng and his message is received with dramatic gesture and excited speeches. Then comes the runner from the west kiva and the same dramatic performance is enacted.

These are the runners sent to the frontiers who bring word of the enemy, Apache, Comanche, or Navajo, gathered for a raid on the pueblo crops. Then comes the runner from the north, bringing liquids of which all partake, these being for the purification of the warriors about to depart for the frontier. Then follow . . . dramatic preparations for battle and the procession disappears in the depths of the subterranean kiva. This closes the historical portion of the drama.

Then follows the series of Green Corn Dances, by two alternating groups of more than a hundred men, women, and children, all picturesquely dressed in ancient native costumes. In addition to the dancers in each group there are about fifty drummers and musicians. The ceremony comprises many complicated movements during which the fantastically dressed Koshare, who are supposed to be invisible, weave in and out among the dancers. These dances are an invocation to the deities that have given the corn and brought it to maturity and who are now implored to protect it from the enemy.

Other ceremonials survive among the eastern pueblos and may be seen somewhere at some time, but vary from year to year so widely that no full account of them can be given here. At the Fiesta at Santa Fé some of them have been revived in recent years and a brief mention of the most striking may be made:

The Sun Dance, formerly engaged in by a whole village in the spring, is now represented by two men and two women personating the two halves of the village. It celebrates the return of the sun and the growing season with a dramatization of the planting, cultivation, and growth of the corn and is almost identical with the Acequia dance, a Mexicanized celebration at the time of the turning on of water in the ditches.

The Basket Dance is one of the most beautiful of these in the spring. The basket is symbolic to the Indian of food, of the seed which is carried in it, of the meal made from the harvested grain and of the loaves made from it. The invocations to fertility accompanying it refer not only to plant but to human life.

The Eagle or Thunderbird Dance is a dramatization of the relationship between this sacred bird and the sky powers and may be given in spring or summer. Two young men are costumed as eagles, and in the course of

the dance imitate almost every movement of these great birds — soaring, hovering over the fields, perching in high places, resting on the ground and going through various mating gestures.

The Buffalo Dance, given in winter, celebrates the relation of the tribe to the larger animal life about them. The dancers are masked as buffalo, elk, antelope, or mountain sheep. The procession is led by a costumed hunter, and by the Buffalo Mother — the symbolic Mother of all animal life in the region — and commemorates the community hunt, which was organized with ceremony and under strict regulations. The Bow and Arrow Dance is an autumn hunting ceremony, rich in mimicry and symbolism relating to the hunters and the animals represented.

The Comanche Dance expresses the idea of frightfulness, which for centuries the settled pueblos have associated with these enemies of the east. Huge fantastic headdresses, and the body painted black, symbolize fury and preparation for battle. Many so-called war dances are in reality peace dances, performed in a religious spirit to celebrate the close of hostilities, with elaborate dramatization of the episodes of the war.

As among the Hopis, there are a great number of minor social and family celebrations in New Mexico: The Snowbird Dance, named from little imitation birds worn in the hair, is in reality a birth ritual, through which babies are introduced to the life about them. The Wheel Dance of the women, performed on a circular platform and going forward with a continuous circular movement, is a survival of an ancient war dance of women performed when the men were away on the war-path. Braiding the Peace Belt symbolizes the bonds of friendship and was once a customary performance in compliment to visiting tribes who brought gifts.

The Inter-Tribal Ceremonial and Fair, held at Gallup, New Mexico, late in August, 1927, for the sixth time, under the direction of a white manager, by fourteen Southwestern tribes, is an attempt to give a serious and worthy presentation of Indian dramas, games, and races. In another aspect, it may be compared to a County Fair at which are exhibited the handicrafts and agricultural products of Indian farmers and their wives and of Indian school children. Each of the tribes attending offers some picturesque and striking episode from its traditional dances, runs or rides in the track races, and presents its best singers and drummers in competition with the others. Ancient games are revived and the rare Fire-Making, Eagle, Feather, and Devil Dances are given.

As the number of white visitors increases at all these Indian Fiestas, the dances are less and less unconsciously performed and less primitive in character. Already Mexicanized and Christianized in some details, they are the fragmentary expression of a way of life that is all but gone. Indian children, educated in Government and mission schools, no longer learn the rituals perfectly or practice the intricate dances suitable to them. The costumes are now a mixture of ancient and modern styles; only the older performers have inherited a complete outfit for ceremonial occasions. The Indian is finding new avenues of art and devotional expression, but losing something rarely beautiful and more spiritual than the prosaic-minded onlooker can realize.

CHAPTER XIX

CEREMONIAL CHANTS, VERSES, AND MELODY

To the Indian, art is simply another phase of life, intensified. He makes no distinction between sacred and secular, between industry and religion. Song and poetry are with him welded into one in process of composition. Natalie Curtis relates that when she asked a young Hopi composer which came first in his song, words or music, he replied in bewilderment: 'I made a song, a song *is* words and music — all comes together.'

Song, meaning thereby a unity of words and melody, is infinitely important in the life of an Indian. 'Not all songs are religious, but there is scarcely a task, light or grave, scarcely an event, great or small, but has its fitting song . . . truth, tradition, history, and thought, are preserved in ritual of poetry and song. The red man's song records the teachings of his wise men, the great deeds of his heroes, the counsel of his seer, the worship of his god.'

Singing is not, as with us, a rendition of something composed by a musician to be performed before an audience; it is an appeal to the Higher Powers or a relation of a personal experience. Just as designs on blankets and pottery are symbols of prayer, so the poetic idea with its characteristic melody is a symbol of veneration, of appeal, of an Indian's attitude toward the Nature Powers and the Universe. A single word may therefore express a whole idea which would require a sentence in English to make the meaning clear.[1] It is 'impressionistic,' so to speak, and may be interpreted by different singers differently. If it belongs to a traditional sacred

[1] Song of the Mocking Bird, page 156.

ceremony, its mystery is guarded so that it shall not be profaned. Often the words of such ceremonial chants are archaic and by repetition believed to be magical.[1] The nearest resemblance we can find in English is the repetition of the phrase, 'Good Lord, deliver us,' in the Litany.

It follows that melody without verse or verse without melody is insignificant, to the Indian way of thinking. Songs are owned by the Clans, or by Societies, or by the persons who compose or inherit them, according to their traditional, ceremonial, or occasional character. Some are suitable to be sung by women, but most of them are composed and sung by men. The Pueblo women have their traditional chants for the celebration of warriors, for the autumn basket dances, for the entertainment of children, or to accompany their spinning and grinding rhythms.[2] Casteñeda describes as something unique Indian men sitting at the doorways and accompanying with a flute the women at their grinding on the metates.

Serious songs are intended as formulas to produce a magical result in curing sickness; or to bring luck in hunting or gambling; or as essential accompaniments of rites and dances for rain-making. As Mary Austin happily puts it, 'to make the world work well with God.' Though the Indian has not advanced beyond the tribal stage and has therefore no national songs, he celebrates his warriors and their victories in verse. And besides all these varieties of singing, there is an inexhaustible number of personal, seasonal, and occasional songs.

'It is difficult for book-versed men,' says Professor Alexander, 'to realize the degree in which primitive

[1] See Geronimo's Song, page 161.

[2] Corn-Grinding, Zuñi, page 162.

poetry is personal and seasonal. It is of the nature of prayer and it may be sung only as part of the ritual to which it belongs; it pertains to an hour of the day, a season of the year and is forbidden at all other times; it is the sole right of a man to whom it was revealed in a dream. It expresses a mood or condition apart from which it has no propriety and is not uttered — these are only a few of the conditions which indicate how indissolubly, in the Indian's thought, his songs are a part of his life.'

The theme of love, which is so large a part of the poetry set to white men's music, is almost wholly absent from Indian songs. Courting is rarely carried on by singing, though the suitor may sometimes play the flageolet at a distance on the hills around the village. Among the Papagos 'love-charm' songs are regarded as dangerous. Incidentally may be mentioned the three instruments which accompany singing — the flute, the drum (of several kinds), and the rattle. Of these the drum, which carries the major rhythm for the dancers, is the most important.

Of the three elements of music regarded as essential to music by white peoples, the Indian has only the two, rhythm and melody — harmony is lacking. The rhythms are extremely difficult and variable; the melodies brief, with sudden changes of intervals and repeated over and over. In dancing, the performers follow the drumbeat which often differs from the rhythm of the chant. It often happens that a drum beat in two-four time, or even five-eight time, will accompany a melody sung in three-four time. That is, 'the beat of the drum governs the bodily movements while the song voices the emotional appeal.' There is 'a rhythm within rhythm' against the drums and frequent changes of measure in the tempo.

Mary Austin, in speaking of the governing rhythm of the drums, says:

> It presents a delicacy of rhythm patterns scarcely equaled by a modern orchestra — drum rhythms, foot rhythms made more intricate by the shifting of men, women, and children in the figures of the dance, melodic rhythms, the running clash of *conus* shells, the roll of gourd-imprisoned pebbles like the sudden rush of rain.

To these characteristics, so alien to our songs, there is added at intervals a pulsating intensity of the voice and, among the Navajos, frequent use of the portamento, which is disagreeable to our ear. Natalie Curtis says, however, that the 'coyote cry' of the Plains Indian is unknown in the Southwest. 'The song of the Pueblo men is a strong, clear outpouring from full lungs, while the note of the ceremonial chant is deep and solemn. The women of the Rio Grande and Zuñi pueblos have high, flutelike voices, but the gentle Hopi women sing with veiled tone of peculiar feminine charm.'

The songs chosen to illustrate the characteristic verse of the different Southwest tribes are necessarily limited as to length; and their subjects, as will be seen, chiefly relate to rain, to the corn which they must have to live, and to the animals which help them to obtain their desires.

SONG OF THE MOCKING-BIRD[1]

The Yuma Indian who sang this to Natalie Curtis, told her it was a song of happiness: 'The Mocking-Bird sings only when it is happy. . . . It sings that the world is fair, the clouds are in the sky, and it is glad at heart. Then I, too, am glad at heart and go on my up-hill road, the road of goodness and happiness.' Two versions are given: the literal version illustrates the symbolic use

[1] As printed in *The Indian's Book*, Natalie Curtis, Editor.

of a few words to express an idea of which the Indian can infer the entire meaning. The second version is the interpretation made by the recorder.

I

Sky so thinly covered with clouds,
With clouds,
Sky so thinly covered with clouds,
With clouds,
The mocking-bird he it is who thus sings.
The mocking-bird he it is who thus sings.

I go up the mesa
I go up the straight trail.

II

Thin little clouds are spread
Across the blue of the sky,
Thin little clouds are spread —
Oh, happy am I as I sing,
I sing of the clouds in the sky.

Thus tells the bird,
'Tis the mocking-bird who sings,
And I stop to hear, for he is glad at heart
And I will list to his message.

Then up the hill,
Up the hill I go my straight road,
The road of good —
Up the hill I go my straight road,
The happy road and good.

THE TOWN CRIER CALLS AT DAWN TO ANNOUNCE THE FEAST (PUEBLO) [1]

All people wake, open your eyes.
Become children of light, vigorous, active, sprightly.
Hasten clouds from the four world quarters;
Come snow in plenty, that water may be abundant when summer comes.

[1] J. W. Fewkes.

Come ice, cover the fields, that the planting may yield abundance,
Let all hearts be glad!
The knowing ones will assemble in four days;
They will encircle the village dancing and singing songs
That moisture may come in abundance.

GOPHER SONG (PIMA) [1]

In the reddish glow of nightfall,
In the reddish glow of nightfall,
I return to my burrow
About which the flowers bloom!

With the four eagle feathers,
With the four eagle feathers
I stir the air. When I turn
My magic power is crossed.

And I make hills of soft earth;
And I make hills of soft earth;
My breath withers all before it;
My breath withers all before it.

SONG OF THE RACE (PIMA) [1]

Many people have gathered together,
I am ready to start in the race,
And the swallow with beating wings,
Cools me in readiness for the word.

Far in the west stands the Black Mountain
Around which our racers ran at noon.
Who is this man running with me,
The shadow of whose hands I see?

LAST WORDS OF THE PROPHET

(Song from the Navajo Mountain Chant.) [2]

Farewell, my younger brother!
From the holy places the gods come for me.

[1] Frank Russell: *The Pima Indians*, 26th ARBE, 1904–05.

[2] As printed in Cronyn's Anthology: *The Path on the Rainbow*, and translated by Washington Matthews.

You will never see me again; but when the showers pass and the thunders peal,
'There,' you will say, 'is the voice of my elder brother.'
And when the harvest comes, of the beautiful birds and grasshoppers, you will say,
'There is the ordering of my elder brother!'

A SONG FROM THE GARDEN OF THE HOUSE GOD (NAVAJO)[1]

Truly in the East
The white bean
And the great corn-plant
Are tied with white lightning.
Listen! Rain approaches!
The voice of the Blue-Bird is heard.

Truly in the East
The white bean
And the great squash
Are tied with the rainbow,
Listen! The rain approaches!

MAGPIE SONG (NAVAJO)[2]

The Magpie! The Magpie! Here underneath
In the white of his wings are the footsteps of morning.
It dawns! It dawns!

The Papagos are regarded by Frances Densmore as particularly poetic and the following song is part of a ceremony intended to bring rain:[2]

I

Here I am sitting with my power
I bring the South Wind toward me.
After the wind I draw the clouds
And after the clouds I draw the rain
that makes the wild flowers grow on our home ground
and look so beautiful.

[1] As printed in Cronyn's Anthology: *The Path on the Rainbow*, and translated by Washington Matthews.

[2] ARBE.

II

By the sandy water I breathe in the odor of the sea
From there the wind comes and blows over the world
By the sandy water I breathe in the odor of the sea
From there the clouds come and rain falls over the world.

III

The cottonwood leaves are falling and flying in the air.
On top of the remaining mountain, they are flying around
And falling as though they were wet.

IV

Under us the world spreads wide
From there the corn grows up
On the leaves the water moves in little drops.
Under us the mountain stands wide
And the water spreads over the vines.

AN INVOCATION FOR RAIN (SIA PUEBLO) [1]

Rain-makers, come out from all roads that great rivers may cover the earth;
That stones may be moved by the torrents;
That trees may be uprooted and moved by the torrents.
Great Rain-makers, come out from all roads, carry the sand of our earth mother of the place.
Cover the earth with her heart, that all seeds may develop.
That my children may have all things to eat and be happy;
That the people of the outlying villages may all laugh and be happy;
That the growing children may all have things to eat and be happy.
This way our great father wishes you to come.
This way our great mother wishes you to come.
That we may have all kinds of seeds and all things good;
That we may inhale the sacred breath of life;
That our fathers and our mothers may bring us happy days.
Let our children live and be happy.
Send us the good south winds.
Send us your breath over the lakes that our great world may be made beautiful and our people may live.

[1] Mrs. M. C. Stevenson in 23d ARBE.

PRAYER FOR RAIN (FROM THE PUEBLO OF SIA) [1]

White floating clouds,
Clouds like the plains
Come and water the earth.
Sun embrace the earth
That she may be fruitful.
Moon, lion of the north,
Bear of the west,
Badger of the south,
Wolf of the east,
Eagle of the heavens
Shrew of the earth,
Elder war hero,
Warriors of the six mountains of the world,
Intercede with the cloud people for us,
That they may water the earth.
Medicine bowl, cloud bowl, and water vase
Give us your hearts,
That the earth may be watered.

I make the ancient road of meal,
That my song may pass over it —
The ancient road.
White shell bead woman
Who lives where the sun goes down,
Mother Whirlwind,
Father Sus'sistinnako,
Mother Ya'ya, creator of good thoughts.
Yellow woman of the north,
Blue woman of the west,
Red woman of the south,
White woman of the east,
Slightly yellow woman of the zenith,
And dark woman of the nadir,
I ask your intercession with the cloud people.

KOROSTA KATZINA SONG (HOPI)[2]

Yellow butterflies,
Over the blossoming virgin corn,

[1] Mrs. M. C. Stevenson in 23d ARBE. [2] From *The Indian's Book.*

With pollen-painted faces
Chase one another in brilliant throng.

Blue butterflies,
Over the blossoming virgin beans,
With pollen-painted faces
Chase one another in brilliant streams.

Over the blossoming beans,
Over the virgin beans
Wild bees hum.

Over your field of growing corn
All day shall hang the thunder-cloud:
Over your field of growing corn
All day shall come the rushing rain.

HE-HEA KATZINA SONG (HOPI) [1]

Corn-blossom maidens
Here in the fields,
Patches of beans in flower
Fields all abloom
Water shining after rain,
Blue clouds looming above.

Now behold!
Through bright clusters of flowers
Yellow butterflies
Are chasing at play,
And through the blossoming beans
Blue butterflies
Are chasing at play.

GERONIMO'S MEDICINE SONG [2]

Geronimo, when he was an old man, explained and sang this song to Natalie Curtis. He said: 'It is a holy song and great is its power. The song tells how, as I sing I go through the air to a holy place where Yusun (the Supreme Being) will give me power to do wonder-

[1] From *The Indian's Book.* [2] *Ibid.*

ful things. I am surrounded by little clouds, and as I go through the air I change, becoming spirit only.'

O, ha le
O, ha le!
Through the air
I fly upon a cloud
Towards the sky, far, far, far,
O, ha le
O, ha le!
There to find the holy place,
Ah, now the change comes o'er me!
O, ha le
O, ha le!

A Zuñi Corn-Grinding song, sung by the youths while the maidens grind corn on the metates, translated by Natalie Curtis, is reprinted from 'The Indian's Book.'

Lovely! See the cloud, the cloud appear!
Lovely! See the rain, the rain draw near!
  Who spoke?
'Twas the little corn-ear
High on the tip of the stalk
Saying while it looked at me
  Talking aloft there —
'Ah, perchance the floods
  Hither moving —
Ah, may the floods come this way!'

In the following Corn-Grinding song from 'The Indian's Book,' the Rainbow is imagined as the Rainbow Youth and the swallow is the summoner of rain.

Yonder, yonder see the fair rainbow,
See the rainbow brightly decked and painted!
Now the swallow bringeth glad news to your corn,
Singing, 'Hitherward, hitherward, hitherward, rain,
  Hither, come!'
Singing, 'Hitherward, hitherward, hitherward, white cloud, Hither, come!'
Now hear the corn-plants murmur,

GERONIMO, THE APACHE CHIEF

'We are growing everywhere!'
Hi, yai! The world, how fair!

DEDICATION OF A NEW HOUSE (NAVAJO) [1]

Man (*scattering white cornmeal about the circumference of the room*):
May it be delightful, my house;
From my head may it be delightful;
To my feet may it be delightful;
Above me may it be delightful;
All around me may it be delightful.

(*flinging meal into the fire*)
May it be delightful and well, my fire.

(*flinging meal up the smoke-hole*)
May it be delightful, Sun, my mother's ancestor, for this gift;
May it be delightful as I walk around my house.

(*sprinkling meal out the doorway*)
May it be delightful, this road of light (the path of the Sun) my mother's ancestor.

Woman (*making meal offering to the fire, says quietly*):
May it be delightful, my fire;
May it be delightful for my children; may all be well.
May it be delightful with my food and theirs; may all be well.
All my possessions well may they be made.
All my flocks well may they be made.
(that is, may they all be healthy and increase).

LOVER'S WOOING OR BLANKET SONG (ZUÑI) [2]

I

O what happiness!
How delightful,
When together we
'Neath one blanket walk.
We together

[1] Cosmos Mindeleff, in 17th ARBE, 1898.
[2] Carlos Troyer in *Traditional Songs of the Zuñi.*

'Neath one blanket walk,
We walk.
(repeated)

II

Can it be that
My young maiden fair
Sits awaiting,
All alone tonight?
Is she waiting
For me only?
Is she waiting
For me only?

III

My hope it is
My young maiden
Sitting all alone
And awaiting me;
Will she come then?
Will she walk with me?
'Neath one blanket
We together be,
We — we two — we two,
We two, we two —
Will she come?

A LOVER'S LAMENT (TEWA)[1]

My little breath, under the willows by the water-side we used to sit
And there the yellow cottonwood bird came and sang.
That I remember and therefore I weep.
Under the growing corn we used to sit,
And there the little leaf bird came and sang.
That I remember and therefore I weep.
There on the meadow of yellow flowers we used to walk.
Oh, my little breath! Oh, my little heart!
There on the meadow of blue flowers we used to walk.
Alas! how long ago that we two walked in that pleasant way.
Then everything was happy, but, alas! how long ago.

[1] Herbert J. Spinden: *Home Songs of the Tewa.*

There on the meadow of crimson flowers we used to walk.
Oh, my little breath, now I go there alone in sorrow.

SONG OF GOTAL LIII (MESCALERO APACHE, MEDICINE SONG)[1]

The black turkey-gobbler, under the East, the middle of his tail; toward us it is about to dawn.
The black turkey-gobbler, the tips of his beautiful tail; above us the dawn whitens.
The black turkey-gobbler, the tips of his beautiful tail; above us the dawn becomes yellow.
The sunbeams stream forward, dawn boys, with shimmering shoes of yellow;
On top of the sunbeams that stream toward us they are dancing.
At the east the rainbow moves forward, dawn maidens, with shimmering shoes and shirts of yellow dance over us.
Beautifully over us it is dawning.
Above us among the mountains the herbs are becoming green;
Above us on the tops of the mountains the herbs are becoming yellow.
Above us among the mountains, with shoes of yellow I go around the fruits and the herbs that shimmer.
Above us among the mountains, the shimmering fruits with shoes and shirts of yellow are bent toward him.
On the beautiful mountains above it is daylight.

MEDICINE SONG (APACHE)[2]

Stenatliha, you are good, I pray for long life.
I pray for your good looks.
I pray for good breath.
I pray for good speech.
I pray for feet like yours to carry me through a long life.
I pray for a life like yours.
I walk with people; ahead of me all is well.
I pray for people to smile as long as I live.
I pray to live long.
I pray, I say, for a long life to live with you where the good people are.

[1] Pliny Earl Goddard, in Putnam Anniversary Volume, 1912.

[2] Edward S. Curtis.

Stenatliha in Apache corresponds to *Estsán-atlehi*, the Navajo Goddess of Creation.

I live in poverty.
I wish the people there to speak of goodness and to talk to me.
I wish you to divide your good things with me as a brother.
Ahead of me is goodness; lead me on.

CHAPTER XX

CEREMONIAL GAMES AND EDUCATION

Religious pageantry does not fill the whole of the Indian's desire for drama — he has his fun as well. The Koshare in the solemn ceremonials are dignified enough, being invisible spirits of the ancestors returning to help their people. But on occasion and quite spontaneously, they become clowns making fun for the Indians by 'taking off' white people. Elizabeth Willis De Huff describes a farce at one of the pueblos which rehearses the coming of the Spaniards and the arrival of the American prairie schooners.

Since nothing escapes the observation of the Indians, the impersonations are wonderful indeed! The Spaniards arrive, ragged, dirty, grizzly-bearded, unkempt beggars. They are fed and clothed by the Indians, whereupon they immediately begin to dictate and make demands. A bull fight is staged and numerous cock fights — then come the prairie schooners to camp outside the village. The drawling tones of their occupants and their inquisitive conversations are ridiculously true to life. Drab, hideous in lanky outline, dust-stained, bedraggled, they contrast with the gorgeous flash and flare of color in the costumes of the Indians, both actors and spectators. They . . . rush around among the Indians rudely examining their beads, ear-rings, bracelets, and each item of their apparel, even peeping beneath skirts to examine the intricacies of wrapped leggings. Next they trade and cheat, insult Indian maidens by pinching their averted cheeks and act as real savages.

Occasionally in one act will appear a fat Indian man adorned in an extremely low-cut evening gown, to sing and trill upon an improvised platform or to flirt with all the handsome braves. Each year the historical arrangement of the pageant is the same, but each year brings also innovations.

Once, between the acts of the Buffalo and Deer Dance,

religious relic of hunting days, a group of small Indian boys appeared dressed as rag-a-muffins in cast-off garments of white neighbors. To the accompaniment of vigorous stamping in a dance closely related to the 'Charleston,' they sang something strangely familiar in tune. . . . Suddenly as it was repeated the true song flashed upon me — 'Any old rags any bones any bottles to-day!'

They are good listeners but never tell all they know. There is nothing that gives the Indian better material for sarcastic expression, for his farces and for his just-for-fun dances, than the racial differences and idiosyncrasies of his white brother. And he uses them with a touch of irony and with the skill of the true dramatist.

After twenty-five years of increasing study of the customs of Indians, Stewart Culin's monograph on 'American Indian Games' remains the chief authority. He established the fact that games and amusements grew out of the formal ceremonies already described.

Back of each game is found a ceremony in which the game was a significant part. The ceremony has commonly disappeared; the game survives as an amusement, but often with traditions and observances which serve to connect it with its original purpose. The ceremonies appear to have been to cure sickness, to cause fertilization and reproduction of plants and animals, and in the arid region to produce rain. Gaming implements are among the most significant objects that are placed upon many Hopi altars, and constantly reappear as parts of the masks, headdresses and other ceremonial adornments of the Indians generally. These observations hold true of the athletic games as well as the games of chance.

The ball was a sacred object not to be touched with the hand, and has been identified as symbolizing the earth, the sun or the moon. In the ring-and-pole game, the original form of the ring was a netted hoop derived from the spider web, the emblem of the Earth Mother. The performance of the game was bound up with ceremonies of reproduction and fertility. In the kicked-stick and ball-race games of the Southwest the primary object seems to have been to protect the crops against sand storms within the circuit traversed.

Briefly, Mr. Culin divides these games into two general classes: games of chance and games of dexterity. Games of pure skill and calculation, such as chess, are entirely absent; and playing cards are one of the few adopted from white people. The formal games are played only by adults with certain regulations and never in a haphazard way. The implements used to have a symbolism of their own; the arrow being masculine and the netted wheel feminine. The basket trays used in the Lalakonti Dance are supposed to be derived from the shield carried in war.

The sacred games most often played are of an athletic character — races of several kinds, including the kicking-race in which stones are carried on top of one foot, and the formal game of ball. Foot-racing attends almost every one of the ceremonies among the Hopis. Dr. Hough describes the preparations of Sikyabotoma, a runner for the Walpi Flute Society, whose duty it was to carry offerings to the various shrines and springs:

> Skirting on the first day the entire circuit of the cultivated fields of the pueblo and coming nearer and nearer each day until he tolls the gods to the very doors of Walpi.
>
> Each day Sikyabotoma, wearing an embroidered kilt around his loins, his long, glossy hair hanging free, stands before the Flute Priests. . . . They fasten a small pouch of sacred meal at his side and anoint him with honey on the tip of the tongue, the forehead, breast, arms and legs, perhaps to make him as swift as the bee. Then he receives the prayer-sticks, and away he goes down the mesa. . . . He stops at a spring, then at a shrine, and in a very short time can scarcely be distinguished running far out by the arroyo bounding the fields.

The sacred game of foot ball, characteristic of the Southwest Indians, is in fact a race in which a small stone or wooden ball is kicked around a long course, for the magical protection of the fields from sandstorms. Guess-

ing games are very widely distributed, the commonest being played with two or four bone or wooden cylinders, one plain and one marked, held in the hands by one player, the other side guessing in which hand the unmarked cylinder is held. Count is kept with sticks, and songs accompany the playing. There is also the hidden-ball game played with four wooden tubes or cups under one of which a ball or stick is hidden. The number four refers to the world quarters and the game is sacred to the war gods.

The Hopis are especially fond of athletic games and often play them for amusement rather than ceremony. The most common are shinny, throwing darts, shooting with bow and arrow at a mark, hurling a sort of boomerang club, wrestling, and boys struggling with girls for cornstalks, as after the Snake Ceremony. The Hopis do not gamble on their games as the Navajos, Zuñis, and Rio Grande villagers do.

The gallo race, 'chicken-pull,' is found everywhere in New Mexico among Spanish and Indians and is a favorite amusement with the Navajos. A cock is buried in the sand, so that only his head and perhaps two inches of his neck can be seen. The contestants may be on foot, as at Ácoma, or on horseback, as at Ganado, but they endeavor to snatch the fowl and carry it off. Whoever does so is pursued by all the others, who tear off feathers and pursue the victor for hours over the rough country.

Children's amusements, among Indians as elsewhere, imitate the games of their elders; and they have many which correspond to those of white children. The whip top, made of horn, bone, stone, or wood, is almost universal. Tag, pebble-shooting and racing, stilts, dolls and 'playing house' for the girls, cat's-cradle with many intricate variations — these and many others give zest to the Indian child's days. The Navajos have a legend

that the figures of cat's-cradle were taught them by the holy spiders on condition that the game should only be played in winter when the snakes and spiders are asleep.

Bandelier explains the mythological origin of games as a series of contests in which the culture hero overcomes some foe of the human race by exercise of superior cunning, skill, or magic. The Divine Twins, miraculous offspring of the Sun, who live in the East and the West, were the first gamblers, and ruled night and day, summer and winter. Their mother, sometimes their grandmother, is identified with the Earth, or the Spider Woman, who is the embodiment of the feminine in nature. These mythic characters, always contending, are the patrons of play and their games are the games now played by men.

Long before the Indian came in contact with Europeans, he had a system of education designed to pass on to his children his experience, his skill, and his lore. He invented 'learning by doing,' and to this fundamental he added intensive cultivation of perception and memory and respect for the accumulations of tradition. In childhood, by unconscious absorption from a small and closely knit group, he learned what was proper and what was obligatory, in speech, manners, and belief. As Lummis aptly puts it: He had no books to remember for him. He grew up with his parents, attempting to imitate their industry and their behavior and stimulated by praise or mild reproof to do his best. It is one of the anomalies of primitive life that children are so seldom punished. Babies cry in an Indian pueblo as elsewhere, but screaming and quarreling are almost never heard. Children play placidly rather than noisily, and an Indian woman is the gentlest of mothers.

Leaving out the idea of book-learning altogether, Indian girls grew up much as farmers' daughters of the

eighteenth century, learning the common household tasks and weaving and pottery-making from older women. Besides cooking and brewing of dyes and grinding of meal, there was always the vast matter of finding materials, preparing and preserving them, and inventing new uses for them. In the chapters on family custom and on pottery-making and blanket-weaving, the infinite detail and the skill required are described — and all this the little girl learned by association with her mother and her grandmother. In secret moments — for Indian women are puritanically modest — she learns the proper behavior when she arrives at puberty, when she shall be married, and when she bears children. For all this intricacy of living, a woman's lore has been built up through the ages to be passed on to worthy daughters.

The boy has a training from babyhood no less arduous. He must become an athlete of endurance and an expert hunter, a rider of wild horses and a long-distance runner, and a farmer of arid and unpromising lands. As member of one or more of the fraternal orders among the Pueblos, he must commit to memory with exactness long ceremonial rituals and chants which embody the customary law and history of his people. And if he is destined to be a medicine man, he must undergo a severe professional training.

Charles F. Lummis, in a chapter on 'Finishing an Indian Boy,' describes this preparation in some detail:

> As for the lad who is elected to follow the unattractive life of a medicine man, he has before him one long curriculum of toil. In all Indian tribes the shamans or medicine men are the most important personages — the real power behind the throne, no matter what the outward form of government. Upon them depends the success of the farmer, the hunter, the warrior; they have to keep the witches from swooping off the people, to give proper welcome to newcomers to this world, to

cure the sick, and give safe-guard to the departed on their long journey to the Other Country.

By way of illustration, Lummis describes the training of a rather sickly boy, Rufugio, who was given by his parent to the chief of an important order, in order to induce the Powers Above to spare his life. This shaman and his colleagues of the order, from the time when the boy was adopted, visited him daily, teaching him what was necessary to his general education, until he was old enough to be initiated.

When the boy was twelve years old, the ceremony began with a twenty-four hour fast and was intended as a test of the boy's courage and endurance and his real desire to 'take the true road.' It consisted of ceremonial smoking, the learning of many long prayers in their proper order and *verbatim*, drinking of sacred water, and finally, keeping awake for forty-nine hours continuously, to listen to the history and traditions of the Society.

And this trying affair was merely the initiation into 'a lifetime of hard and patient study, infinite practice, and frequent self-denial. To acquire that marvelous legerdemain which gives the medicine men their chief prestige . . . to go through innumerable fasts . . . to secure blessings for his people and avert all ill from them.'

All this for small reward except the universal respect which the medicine man commands.

Elsewhere the story-telling feature of Indian life has been commented upon, which serves as amusement and education, and to keep the young out of mischief after nightfall. By all these means Indian life is tied together. It holds fast to what they have acquired and looks forward to protection of the young — a kind of medicine bundle of habits and thought to carry along the Trail of Old Age.

PART V

MYTHOLOGY AND BELIEF

With us the arts are enterprises specialized and set apart to be indulged in or ignored as taste and time may dictate. This is not at all the Red Man's case. All his arts are vital enterprises and they are so intimately a part of his living that from food-getting to politics his whole society would lose (and does lose) organization without them. The only analogy in our own affairs . . . to make this clear is that of the Church.

What, indeed, is the Church except the language of our religious life? Ecclesiastical music and fine art, the red-letter calendar of its festivals, its rites, its theologies and its creeds. All these center in dramatic expression, which as nearly as expression can, shows forth the religious life.

The Indian's ritual similarly is for him the expression of his central nature. His songs are moments of action: war-making, love-making, crop-raising; his dress is a public proclamation or petition; and his 'dance' is a very potent medicine. . . . Art is a serious business and it cannot be comprehended if taken piecemeal . . . for even his myths are intelligible only when they are understood for what they are: the scenarios and exegetics of his ritual life.

HARTLEY BURR ALEXANDER

CHAPTER XXI

MYTHS AND FOLKTALES

Mythology, handed down, and folktales, still in process of growth, correspond, among primitive Indians, to our classic and modern literature. They combine in one body of lore ancient dogmas concerning the gods and the creation of the world; explanations of cosmic phenomena; realistic stories of the behavior of men and animals and their relation to each other; poetry embodied in the chants of ritualistic observances; and bugaboo tales which are sometimes jokes and which sometimes, like Æsop's Fables, contain a moral for the children.

These various aspects of intellectual life range from the most solemn rehearsal of the great myths on which their religious life is founded, chanted with all the dignity of the Hebrew Psalms or the Catholic Mass, to evening story-telling around the hearth fire, for pastime and to keep the children safely at home. 'Every striking phenomenon observed by the American Indian,' says Powell, 'has a myth to account for its origin. The horn of the buffalo, the tawny patch on the shoulders of the rabbit, the crest of the bluejay, the tail of the magpie, the sheen of the chameleon, the rattle of the snake — thus the folktales of the American Indian seem to be inexhaustible.'

The myth is the first result of human curiosity, beginning in the effort to explain why the stars and the planets move, how animals attain the marks of species. 'Savage myth is savage science,' and these legends are the earliest form in which it is expressed. The story

varies to fit each tribe's general theory of things, and alters with each raconteur's imaginative capacity. Because man seemed so helpless in the primitive universe, there arose the idea of magic power which might come to the aid of the weak. Since early men thought of themselves on the same level of personality with all other animate creatures, they personified all living things and beings. Mythology consequently combines an account of the origin of every thing and creature, accumulated by verbal repetition from generation to generation. And ultimately all tribes of common blood and speech have a common myth and a religion founded on the teachings of that myth.

Cushing quotes an Indian story-teller who explained to him his view of the Zuñi folktales:

> My friends, that is the way we live. . . . I am very glad to demonstrate to you that we also have books; only they are not books with marks in them, but words in our hearts, which have been placed there by our ancients of long ago, even so long ago as when the world was young, like unripe fruit.

These tales were an outlet for the emotion and imagination of the story-tellers themselves — the exceptional, perhaps temperamental, men of bygone ages. While most people were absorbed in the material struggle with environment, the poetic, the spiritually inclined, the artistic or the imaginative soul must have found joy in repeating and embroidering the lore handed down to him, and he inevitably came to have an official status in the social order. As Homer earned his welcome by relating Grecian folklore; as some long-forgotten poet-scientist explained the Hebrew conception of world genesis; so, ages ago, the medicine man and the poet among Indians made his appeal and his place among his fellow tribesmen.

The myths of the Southwest are more consistently

woven together than those of many other stocks and are more fully expressed in the drama and ritual of their ceremonials. They form the basis of religious observances and have, mingled with them, fragments of history and scenarios of romance and adventure. In all the tales, incantation and singing are the accepted way of weaving a magic spell.

Mrs. Sedgwick says very truly that singing is the universal accompaniment of Indian life and worship. 'Throughout the Indian world the song of birds is deemed a magic spell. When, therefore, human beings sing, they too are weaving magic, over the grinding, over the planting, over the painting of jars, to bring the favor of those above upon that special occupation.'

From a considerable body of serious, poetic, and humorous myths and tales are here reprinted a very few which form the basis of many characteristic dramas and of art-forms found on pottery and graven silver ornaments. The first, narrating the Creation of the World and of Man, is perhaps the most thrilling and dignified of those collated by Frank Cushing from the Zuñis. This is the myth of 'A-wona Wilona, the supreme life-giving, bi-sexual power, who is referred to as He-She, the symbol and initiator of life, and life itself pervading all space; and also of the Sun Father who is directly associated with the Supreme Power . . . the giver of light and warmth, and of his co-worker, the Earth Mother.' [1]

Awonawilona conceived within himself and thought outward in space, whereby mists of increase, steams potent of growth, were evolved and uplifted. Thus, by means of his innate knowledge, the All-Container made himself in person and form of the Sun whom we hold to be our father and who thus came to exist and appear. With his appearance came the brightening of the spaces with light and with the brightening

[1] Cushing, in 13th ARBE, 1896.

of the spaces the great mist-clouds were thickened and fell, whereby was evolved water in water; yea, and the world-holding sea. With his substance of flesh outdrawn from the surface of his person, the Sun Father formed the seed-stuff of twin worlds impregnating therewith the great waters, and lo! in the heat of his light these waters of the sea grew green and scums grew upon them, waxing wide and weighty until, behold! they became Awitelin Tsita, the 'Fourfold Containing Mother Earth,' and Apoyan Tachu, the 'All-covering Father Sky.' From the lying together of these twain upon the great world-waters, so vitalizing, terrestrial life was conceived; whence began all beings of earth, men and the creatures, in the Fourfold womb of the World. Thereupon the Earth Mother repulsed the Sky Father, growing big and sinking deep into the embrace of the waters below, thus separating from the Sky Father in the embrace of the waters above. . . .

Now like all the surpassing beings the Earth Mother and the Sky Father were changeable, even as smoke in the wind; transmutable at thought, manifesting themselves in any form at will, like as dancers may by mask-making. . . . Thus as a man and woman, spake they, one to another.

'Behold!' said the Earth Mother, as a great terraced bowl appeared at hand and within it water, 'this is as upon me the homes of my tiny children shall be. On the rim of each world country they wander in, terraced mountains shall stand, making in one region many, whereby country shall be known from country, and within each, place from place. Behold again!' said she as she spat on the water, and rapidly smote and stirred it with her fingers. Foam formed, gathering about the terraced rim mounting higher and higher. 'Yea,' she said, 'and from my bosom they shall draw nourishment, for in such as this shall they find the substance of life whence we were ourselves sustained, for see!'

Then with her warm breath she blew across the terraces; white flecks of the foam broke away, and floating over above the water, were shattered by the cold breath of the Sky Father attending, and forthwith shed downward abundantly fine mist and spray! 'Even so, shall white clouds float up from the great waters at the borders of the world, and clustering about the mountain terraces of the horizons be borne aloft and abroad by the breaths of the surpassing soul-beings, and of

the children, and shall be hardened and broken by thy cold, shedding downward, in rain spray, the water of life, even in the hollow places of my lap! For therein chiefly shall nestle our children, mankind and creature-kind, for warmth in thy coldness.' Lo! Even the trees on high mountains near the clouds and the Sky Father crouch low toward Mother Earth for warmth and protection! Warm is the Earth Mother, cold the Sky Father, even as woman is warm, man the cold being. . . .

'Even so,' said the Sky Father. 'Yet not alone shalt thou be helpful unto our children, for behold!' and he spread his hand abroad with the palm downward and into all the wrinkles and crevices thereof he set the semblance of shining yellow corn-grains; in the dark of the early world-dawn they gleamed like sparks of fire and moved as his hand was moved over the bowl, shining up from and also moving in the depths of the water therein. 'See!' said he, pointing to the seven grains clasped by his thumb and four fingers, 'by such shall our children be guided; for behold, when the Sun Father is not nigh, and thy terraces are as the dark itself (being all hidden therein), then shall our children be guided by lights — like to these lights of the six regions turning round the midmost one — as, in and around midmost space, where these our children shall abide, lie all the other regions of space! Yea! and even as these grains gleam up from the water, so shall seed-grains like to them, yet numberless, spring up from thy bosom when touched by my waters, to nourish our children.'

Thus, and in other ways many, devised they for their offspring.

The Navajo Creation Myth consists of a cycle of four stories, the first about the time when the Navajos lived underground and when there were many witches who changed men into different animals. The second cycle begins when the Navajos came up in a marshy place near Grand Junction Mountain, Colorado, not far from Mancos. They never go back there while living, but there is a pile of dirt in the marshy place which marks it. When the Navajos die, their spirits return to this hole, at the bottom of which a woman sits comb-

ing her hair. When she sees the spirit's shadow, she looks up and beckons him down and he returns to the land of his fathers, where he stays forever, dancing, singing, and hunting.

The second cycle [1] tells of the creation of the Turquoise Goddess, Estsán-atlehi, who lives in a turquoise palace in the middle of the western ocean — of which there are two versions; and with the adventures of her two sons in seeking their father, the Sun.

The first name for this goddess means 'young woman who becomes old and goes away and comes back young again.' She would become old and walk with a stick and go to the east, whence she would return young and beautiful again. Then she would live a long time and do the same thing, going south, west and north, until finally the Sun removed her to a turquoise house in the middle of the western ocean.

THE CREATION

Near the Place-Where-They-Came-Up were two buttes which looked alike, and over the top of one, when the First People emerged, there was always a cloud. In this cloud there was a light like a lot of rainbows tied up together. The First People had a man who was their scout and they sent him to see what caused the cloud. He came back and told them there was a big pool of water under the cloud with beautiful flowers all around it, and the mud of the shore was formed of sacred corn pollen. They would not believe the scout, so he went back and brought down a little pinch of the corn pollen. When the people saw that it was the sacred pollen, they held a council and decided to make something which should be perfect and eternal, something which would rule over them and tell them what to do, something they could pray to and sing to.

So first, they went out and ran down twelve big deer which they killed with their bare hands, so there would be no mark of

[1] As told and interpreted to Dane Coolidge by Hosteen Tla, or Mr. Left Hand, a Navajo Indian at Red Lake, Arizona, in 1925. Compare with different version in Matthews's *Navajo Legends*.

arrows on them, and tanned the twelve perfect skins. Then they laid them down and all the people (or the elements) gathered together to make 'The Something'! The right leg was made first. Its skeleton was made of white shell, the common white beads that the Indians wear; the flesh was made of the sacred corn pollen, but the foot was very rough and had no toes. Then the heat-lightning, which flashes up in the clouds at nights, said:

'I will make the toes — I will make them just right — you can leave it all to me.' Then with a flash he split out one toe after the other, but the foot and the leg up to the knee had no joint.

Then the Sun's rays that shine so bright at midday and blind people, said:

'I will make the joints — I will make them right — I will do it all myself.' So with his rays he broke the leg and made all the joints, but they came apart and would not stay together.

Then the Dawn took its long rays and bound the joints together tight, but the foot could not move. So the Eternal Wind said:

'I will go down into the leg — I will make it move — you can leave it all to me!' The Wind went down into the leg and came out at the toes where you can see the tracks of the whirlwind in the little whorls.

Now the leg could move, but there was nothing to direct it and the Stab-Lightning said:

'I will go down into the leg — I will tell it which way to go — you can leave it all to me!'

The Something was formed as far up as the knee, but there were no veins and no blood.

Then the Red Corn said:

'I will go down into the leg.' And it formed the veins and the blood.

Now the body was built up as far as the waist and they had a big Council whether to make The Something a man or a woman. At last they decided to make it a woman, but they had nothing to make the big arteries around the groin. Then the Striped Corn went down into the body and made those arteries and The Something was a woman. The intestines were made from the long sun-dogs or rays of the Sun, the ribs

were made from white shell, the floating ribs that protect the stomach were made from two abalone shells, the heart was made from solid turquoise, the liver from ground corn and the lungs from ground corn, which is why they are so white.

Now the body was made up to the neck and they made the two arms the same as the two legs. When it came to the windpipe, the Eternal Wind said:

'I will go down — I will make it right — you can leave it all to me!' So he went down into the throat and lungs and formed them; the collar bones were made from the little half-rainbows that you see in the clouds and the jaw was made from another half-rainbow. The teeth and bones were made from white shell, the nose was formed by the Wind and the eyes were made by the Moon and the Sun. The Moon formed the ball of the eyes and the Sun said:

'I will go into it — I will give her light to look around and see!' The pupil of the eye is the Sun and the ball of the eye is the Moon. The ears were formed by the Wind, the way it makes patterns in the sand. Then the Wind went into her ear to make her hear.

Now the Goddess was all made but her hair, which was formed by Night and Dark Cloud together. That is why the Indians' hair is so black, but when it was formed the Rainbow combed it down as far as the Goddess's knees, which is what gives their hair such a sheen when it is wet.

Now the Goddess was all formed, but she could not move nor talk. The Wind said:

'I will go down into her — I will make her walk.' So he did and she could stand up and walk. When she stood up, they put a beautiful feather straight up in her hair behind and on top of her head they put a round crystal like a turquoise. When this was there, a Bluebird flew and lit on the crystal and began to sing and the words went down into the Goddess's mouth, so that she talks as the Bluebird sings. Only the people who have learned to talk like the Bluebird have any great happiness. If they will not listen and learn her song, they are always having trouble and lose everything.

Now the Goddess was all formed, but she did not talk nor have anything to say and the Dark Cloud said:

'I will go down into her — I will make her talk — you can

leave it all to me!' So he went down into her mouth and she talked.

At this time she was very small, only about three feet high, but they put her on the twelve medicine buckskins and in four days she grew up to be a woman. When she had her first flow of blood, the people sang over her for four days, which is the origin of the ceremonial at puberty. (It was prophesied that this song would always be sung over the girls of the Navajos as long as they lived in the world.)

When the Goddess was finished, the people said: 'Everybody has helped to make her except the Earth and the Blue Sky.'

'I will be under her feet and support her,' said the Earth. 'I will feed and take care of her.'

'I will look down on the Earth and make her fertile,' said the Blue Sky. 'I will send the rain to make things grow.' So they all had a part in the creation.

(At this point the Story-Teller interpolated the remark: 'The After-glow and the False Dawn, also the Sunset, each had a part in the making, but I have probably assigned them to the Dawn or the Rainbow.'

THE HERO TWINS SEEK THEIR FATHER

When the Goddess was full grown, all the men wanted her, but she did not love any of them, only she liked the good-looking ones. Of these the Sun was the best-looking, but she would not have him, and at last he whipped her with a quirt behind, not to hurt or punish her, but only to draw her blood, so he could enter her body invisibly — that is, break her skin. So unknown to her she was fertilized by the Sun and gave birth to a boy. Shortly afterwards she was lying down under an overhanging cliff when the water fertilized her again by dropping on her body. So she gave birth to a second son whose father was the Water.

She lived in a canyon, and at the time there was in that country a Great Giant who roamed about and caught and ate everybody he met. But he was in love with the Woman and he did not kill her. He was jealous of her, as she would not have him, and one day when he came to see her he saw the tracks of her two babies outside the hogán. She had dug a hole in the floor of the hogán, and when she saw the Giant coming,

she would put her two children down the hole, cover its mouth with a flat piece of sandstone, and put dirt over it so the Giant would not find them.

But one day he saw their tracks and said: 'Where did you get these children? Who is their father?'

But she said: 'I have no children.'

'You are lying to me,' he said. 'Here are their tracks in the dirt.'

Then she laughed and said: 'These are only the tracks of my hand. I am very lonesome and would like so much to have children, so I make these tracks with the heel of my hand and mark the toes with my finger.'

She made him a track in the sand, and when he looked at them he said: 'I think you are telling me the truth.'

But when the boys became half-grown, she could not hide them any more and the Giant tried to catch them and kill them.

The people who had made the Goddess made for the Sun-Child the first bow, which was of cedar wood, and for a bow-string they used the first long rays of the Dawn. Then the boys asked their mother who their father was and where he was, and she told them he lived in the East. They went east as far as they could go, and came back saying: 'Mother, you have lied to us, our father is not in the East.' She then told them their father was in the South, then the West, then the North, and they went there, but when they came back from the North they said: 'Mother, you have lied to us four times; now we want to know who our father is and where he lives.'

Then she told them that their father was the Sun and that he lived far away in the midst of the western ocean where it would be impossible for them to reach him. Between them and the ocean there were great canyons whose sides stamped together and would crush them. If they got through the canyon, there was a great field of reeds whose leaves were sharp as knives and moved about in the wind. These would cut them all to pieces, but if they escaped the reeds there was a great canyon wall which they could never get over. If they got over the canyon wall and came to the edge of the Great Water, they could not cross over it, and their father's house was in the midst of the Ocean.

But the boys told her they must go to their father, and so they started on their long journey. Their mother taught them a song to sing which would protect them from all their enemies.

'We are traveling in an Invisible Way
To seek our Father, the Sun.'

They sang this song as they traveled, and at last they went past a little spider hole in the ground and some one said: 'Ssh!' four times at them. They looked down into the hole and saw the Spider, who said: 'Do not be afraid of me. I am your grandmother. Come down into my hole!' She said this four times, but they would not try because the hole was too small. Then she told them to blow toward the east, south, west, and north, and when they did that, the spider hole got so big they could go down. But when they went down the hole, they found it was full of bundles of bones wrapped up in spider webs and hung on the wall, the way a spider wraps up flies.

'You need not be afraid,' she said. 'I am your grandmother and will not harm you. These are the bodies of mean men and I killed them.' Then the Spider told the boys all they would encounter and taught them songs and prayers and told them just what to do. She gave each of them a sacred feather plume and told them to look for a little man with a red head and a body that was striped behind. He was like a sand-scorpion, only a little larger — the Jerusalem cricket. She told them everything to do.

When they were going on toward the west, a voice spoke to them from the ground. It was the little old man, and he told them not to scorn him because he was small, for he could help them. He told them each to put their hands down on the ground. Then he vomited into their hands and told them to keep the vomit until they came to the house of the Sun.

The boys went on their way until they came to the canyon whose walls smashed together. Then they said the prayers the Spider Woman taught them and held their feather plumes sideways in front of them. When the canyon walls crashed together, the feather plumes kept the boys from being crushed and they passed through in safety. When they came to the jungle of reeds, they sang the song the Spider Woman had

taught them and touched the tops of the reeds with their plumes. These turned to cat-tails, which pleased the reeds so much they opened up and let them pass.

The boys went on until they came to the hill cliff and followed along it for nearly a year until they made a complete circle and came back to the place where they had first found it. Then they sang songs and prayed and the Rainbow came and made a bridge for them across the canyon— the Grand Canyon of the Colorado. From there they went west a long time and until they could see the Western Water and the Turquoise House of the Sun. On the shore of the Ocean they prayed again and the Rainbow came and made a bridge from the shore to the House.

THE HOUSE OF THE SUN

At the door of the Palace there were two huge snakes which lay across the way and barred their entrance, but they sang the song which the Spider Woman had taught them and the serpents let them pass.

The second door was guarded by a huge bear who also let them pass. The third gate was made of two big knives which slashed across each other, but the boys held out their sacred plumes and stopped the knives. Then they came to the door of the Palace, where there was a turquoise spire with a rattle on top which was the doorbell of the house. They shook the rattle and the wife of the Sun opened the door. She was an old woman and had a daughter and a son. The two boys were dirty and their heads were lousy and unkempt because they had been so long on the way. She asked them what they wanted. They told her they had come to visit their father, the Sun. This made her very angry at first, but at last she let them in, and asked them who their mother was. Then she told them that the Sun was very mean and cruel and would kill them, but she would teach them some songs to sing to protect them.

It was about noon when they arrived, and, after teaching them her song, she had her boy and girl teach them other songs. Then their half-sister sat down between them and combed their hair and made jokes with them about looking so bad.

(This is the origin of the Navajo practice always to make jokes when brothers and sisters and first cousins meet.)

The Sun moved west until he touched the ocean and then he came hurrying home. He was all hot and sweaty and took off his coat and clothes. Then he asked his wife who the two people were who had come about noon. But his wife had wrapped the two boys up in a dark cloud and put them upon a shelf and she told him that nobody had come. The Sun said he had seen them and snatched down the cloud. When he saw the two boys, he was angry and demanded who they were. His wife told him they were his sons who had come to visit him, and so she knew he had been unfaithful to her when he was off for the day.

The Sun was ashamed when he saw how mean the two boys looked and he said he would find out whether they were his children. So he took them to a huge sweat hogán which was made of solid iron. He had his attendants heat it red-hot, then put the two boys in. After a while he opened the door and said: 'Well, boys, are you warm yet?' But the boys had sung the songs which protected them, and they answered: 'No, Father, not yet.' He came back three times more, and they answered each time that they were getting warm and would be warm soon.

'I will make you warm!' the Sun said, and he poured a lot of water on the hot iron. But the Sun's wife and children had taught them songs to sing and the boys were not injured. Then the Sun said: 'I will see whether you are my children,' and took them to a room where many big knives were whirling round. He grabbed them and threw them among the knife blades, but they held out their sacred plumes and the knives did not cut them. Then the Sun took them in and gave them four pipes to smoke, every one of which was poison and would kill them, but they took out the vomit which the red-headed old man had spit into their hands and put it in their pipes which protected them from any harm.

KILLING THE GIANT

When the Sun saw that the pipes did not kill them he said: 'I know you are my sons; now what is it you want me to give you? Over here there are lots of sheep and horses, here is lots of property and here is lots of medicines.'

But the boys told him all they wanted was his cloak and the bow and arrow and throwing clubs which hung on the wall. They wanted them to kill the Giant.

Now this big Giant was the eldest son of the Sun, and he did not want him killed, but he gave the boys the weapons. Then he gave them a final test to see whether they were his children: he put something under them which blew them up into the sky like dynamite and when they came down he asked them where they were. They said: 'We are back in our own country. There is the high mountain near Grand Junction and there is Mount Taylor down south. Now we will seek the Giant and kill him.'

Then the Sun hung his head and said: 'This Giant you wish to kill is my eldest son, but you can kill him if you wish.'

Then the Sun went home and the boys found the Giant by the lake. They were walking on the edge of the bluff, and when he laid down to drink he saw their shadows in the water. 'What are those little things?' he said, and tried four times to catch them under the water. 'I will drink all the water up,' he said, 'and catch them that way.' So he drank the lake dry and laid down to sleep, but when he looked up he saw the two boys on the cliff.

'What are you little things doing up there?' he shouted. 'What is that big thing doing down there?' they answered, mockingly. 'I will kill you,' he said, and grabbed one of his four clubs. When he threw it at them, the Wind said in their ears: 'Drop down on the ground!' So the club went over them. The Giant threw his next club close to the ground and the Wind said: 'Jump up high!' The club went under their feet. And when he threw the next club the Wind said: 'Jump to the right!' When the Giant threw his last club, they jumped to the left. 'Now it is our turn!' the boys said, and began to shoot at him with their arrows. But the Giant was entirely encased in an armor like iron and the arrows glanced off from him. The boys then threw a club which hit him in the head and made him kind of silly. They ran down and beat him on the head, and when that would not kill him, they prayed to the Stab-Lightning. Then one of them jumped up into the air and hit the Giant on the top of the head with the lightning and killed him. His blood stained the rocks red, the petrified trees are his body, the lava is his blood flow.

THE SLAYING OF THE MONSTER BY THE HERO BOYS [1]

The boy, whose name was Slayer, went to the Valley of Danger where the Monster dwelt. It was smooth and very wide and the Monster was asleep in the very midst of it. Slayer walked all around the valley, but could see no way of approach. While he was looking, the Gopher came out of his hole and asked who he was. Slayer told him, and Gopher said he would help him. So he dug a tunnel across the valley and came up under the Monster's heart, where he could feel it beat. Gopher gnawed off the long, coarse hair over it, but the Monster felt him bite and jumped up with a noise like thunder.

'Who are you and what are you doing?'

'I am only the Gopher and I was biting off your hair to make a nest for my little ones.'

This satisfied the Monster, who laid down and went to sleep.

Gopher went back and told Slayer he had dug four connecting tunnels, one under the other, for him to escape into, and Slayer by magic blew into the top tunnel, made it big, and crept through it until he could hear the Monster's heart beat above him. Then he drew his sacred lightning arrow and shot through the Monster's heart. The Monster jumped up with thunderous noise and with the long horn on his nose he ripped up the first gopher hole; but Slayer had rounded the corner and was in the tunnel below; three times the Monster dug, and the fourth time he fell dead before he reached Slayer.

Meanwhile, at the hogán, the Water Boy, brother of Slayer, had been making medicine, and through the magic turquoise had seen Slayer's danger. When he saw blood at the lower end, he knew the Monster was killed and came running. All the chipmunks, striped squirrels, and such came running to claim the spoils and share in the rejoicing. They played in the blood until one chipmunk became red. Another painted stripes and decorated his body. But Slayer said the spoils should go to Gopher, for he had helped him most. Water Boy took the club or sword he had taken from the Giant and cut up the body, taking out the lungs to carry home and filling a big

[1] As told and interpreted to Dane Coolidge, in 1927, by Chee Teasi-ah or Red Point, known as Manuelito.

gut with the blood. From this he gained his third name, The Cutter. He cut off the horn and took the spoils to his mother.

EPISODE OF THE RETURN TO EARTH [1]

After Estsán-atlehi had wed the Sun, she moved to the Palace in the West which he had built for her. To transport the Goddess to her new home a rainbow was laid across a sunbeam. She stood where the two crossed. The Slayer stood at the south end of the rainbow, his brother Water Boy, at the north; Talking God stood at the east end of the sunbeam, the Hogán God stood at the west. In the sand painting these four gods at the ends of the cross form a swastika, there being four goddesses also with them.

When the Goddess had created there the five Holy Clans, she told the four Holy Ones and the five Clan Men to go back to Earth, and she gave them the Rainbow and the Sunbeam to take them to the shore of the sea. To guard them on their journey she gave them the Bear, the Lion, the Big Snake, and the Porcupine and set them all down on the land at daylight. . . .

As the people started east from the shore, they found the big snake and the porcupine were nothing but a nuisance — they couldn't keep up and they had to be carried. The Big Snake and the Bear both had their magic songs, but the people did not know it then. The Porcupine was worthless; all he would do was grunt. The Lion was a good rustler, he would kill lots of deer, but they had to trail him up or he would eat all the meat. The people lived on rabbits, deer, and cactus pears, and whatever they could pick up, and after great hardships reached the San Francisco Mountains in four days. There, as they were tired, they put the Big Snake under the rimrock and left him, after learning his sacred songs. The Porcupine they left under a piñon tree, but he had a holy way of traveling and kept up with them. The Snake stayed under the rimrock, and that was the last of him.

[1] In the fourth cycle of the Navajo Creation Myth, as told by Chee Teasiah or Red Point, known as Manuelito.

THE DEATHLESS ONE AND THE WIND [1]

The Son of God, the Deathless One, had a wife and she was a good woman. One day she went out to gather fruit, and the Hot Wind saw her and stole her away. The Deathless One found the Wind's trail, and knew the footprints; so he went home to his grandmother, the First Woman, and said: 'I have seen the trail of the Wind who has stolen my wife and I am going to follow him.'

So the Deathless One followed the trail until he came upon some people who lived close beside it and he asked of them, 'Have you seen any one pass?'

'Yes,' said the people. 'The Wind passed by a short time ago, and with him went a beautiful woman.' Also they said: 'The Wind is a great pole-player. He has beaten every one and has won all the people. Stop for a while and we will tell you how the Wind plays. If you will let him play with his own pole, he will beat you and will put you with the rest of the men, women, and children that he has won. But if you will wait we will make you two good poles to play with, and then perhaps you will beat the Wind and win back the people and set them free.'

So they made good poles for him, and the Deathless One went on until he came to the Wind's lodge that was made of willow brush, and there, inside, sitting with the Wind, he saw his wife.

'Ho, friend!' said the Wind, 'will you play pole with me?'

'Yes,' said the Deathless One; 'that is why I have come.'

The Deathless One looked at the Wind's pole; it was not made of wood, but of a dead man's thigh bone. He did not want to play with the bone pole. Then he said to the Wind, 'Give me your ring, that I may look at it.' He took the ring and knew that it was made of a live snake, for he saw the gleam of its eyes. He had pins in his hand (cactus thorns?), and with these he pierced the eyes of the snake, and gave back the ring to the Wind. The Wind tried to throw the ring, but he could not because it was dead. He tried again, and then asked the Son of God, 'How did you kill this?'

'I like not your ring nor your bone pole,' said the Deathless One. 'I have a good ring and good wooden poles.' Then he

[1] As told to Natalie Curtis in 1903 by a Mojave-Apache and printed in *The Indian's Book.*

threw away the Wind's ring and pole and made ready to play.

'Where did you get these good poles and this ring?' said the Wind. 'I like them. I will play with you and stake half these people.'

They played one game and the ring leaped over the Wind's pole and fell on the pole of the Deathless One and so the Deathless One won half the people. The second game went the same way and the Deathless One won the other half of the people.

Then said the Wind, 'Are you a runner?'

'No,' said the Deathless One, 'I am not a runner, but I mean to run with you to-day.'

'Let us race,' said the Wind. 'Let us start from the south and race all around the earth. The one that first reaches again the south point shall win the other. If I win you, I shall kill you; if you win me, you may kill me.'

They started from the south and ran all around the earth, and before noon the Deathless One reached again the starting-point. Then he waited till the Wind came. The Wind stepped up close to him and said: 'I am ready if you are ready. You may kill me.' The Deathless One took up a stick and struck at the Wind's head, but every time he struck, the Wind dodged. Then a little fly helped the Deathless One; the fly flew into his ear and said, 'Aim at his head, but strike the shadow of his head upon the ground.'

So the Deathless One struck downward at the shadow and killed the Wind. Then he said: 'I never saw such a man as the Wind. Now I will make him no man, but Wind only.' So he cut the body into four quarters, and threw them east, west, north, and south. That is why the Wind still blows from four directions, but no longer lives in the form of a man. Then the Deathless One released his wife and brought her home.[1]

[1] The wife probably represents the fruitfulness of the earth which was taken away by the hot wind, and upon whose release depended the life of the people.

CHAPTER XXII

THOSE ABOVE AND THOSE BELOW

PRIMITIVE man found himself in a world of individual struggle for existence, in the presence of cosmic miracles, a world of hardship, violence, mystery, and beauty. In the midst of universal change, the Sun, the Moon, and the Earth were perhaps the only stable things he knew. A puny human animal, in a fearsome universe of powers and creatures greater than himself, man saw everything through his own emotion and experience.

Through the ages he gradually built up, from the facts of his experience and from his own imagination, an explanation for the unaccountable elements and happenings by which he was surrounded. And just as each individual saw everything through his own consciousness, so each tribal group came to have a growing body of ideas and tales which crystallized into an accepted lore and which were passed on with variations from one generation to another.

The American Indian embodied his philosophy of life, his explanation of the phenomena and creatures of his limited universe, in myths, in religious practices and beliefs which began to be dimly known, when he came in contact with literate men in the sixteenth century, as curiosities of a bygone form of expression. But even the most learned of white men did not easily understand them. For civilized thinking separates reason from emotion and imagination, and classifies their products into departments, as science, religion, poetry, and story-telling. Probably much of what the Pueblos had accumulated of wisdom and mythology has been lost be-

cause our processes of thought and expression are so different from theirs.

Moreover, what is being salvaged from the traditional thinking of the Indian is only partially understood. His ideas have been translated often inaccurately and always vaguely, through the minds and the vocabulary of white men. His code of manners requires that he assent to a guest's ideas even if they be mistaken. The white man assumes a belief in One God to be rational and essential. The Indian, because he could not make his complicated theory of Supernatural Powers intelligible, and out of deference, has often assented to the white interpreter's conception of a great anthropomorphic spirit.

It is still a controversial question whether these Southwest Indians conceive the Great Mystery as One Spirit, whom we name God. Professor Alexander [1] is convinced that the idea of a Great Spirit, the Master of Life, commonly referred to as 'Father Heaven,' and invariably regarded as beneficent and all-seeing, is a true interpretation of aboriginal conceptions. But he says also that the Indian conception 'is less anthropomorphic than that commonly entertained by an unphilosophic white.' At the same time he distinguishes two ideas in the term 'Heavenly Father': one is 'the sky-throned ruler of the world' and the other 'its Creator,' and he adds that it is rare 'to find Father Heaven in the creative rôle' except in the Zuñi and the California cosmogonies. He continues:

> No one can follow the detail of Indian ritual without being impressed by his intense reverence for the Master of Life and his firm conviction in his goodness. That the Indian more

[1] In this chapter, the lectures of Professor Hartley B. Alexander and his vol. x, *North American Mythology*, 1916, in the series on *Mythology of All Races*, are followed for the most part, except where other authorities are quoted by name.

often addresses prayer to the intermediaries between himself and the ruler of High Heaven, or makes offerings to them, is as natural as that a Latin should approach his familiar saints.

But Indian religion is not to be identified with mythology.

The two are intimately related; every mythology is in some degree an effort to define a religion, but the Indian's religion must be studied in his rites rather than in his myths. The most significant of these are the calumet or smoke-offering to the sky; the sweat-bath, both a means of healing disease and a prayer for strength and purification addressed to earth, fire, water, air; the ceremonies of fasting and vigil for inducing visions that shall direct the way of life; the shamanistic or mediumistic rites resting upon belief in the power of unseen beings to possess and inspire the mortal body; the great communal ceremonies, commonly called 'dances' by white men, which are almost invariably in the form of dramatic prayers addressed to the great nature-powers — to sun and earth, to the rain-bringers, and to the givers of food and game; and finally the rites in honor of the dead and of ancestral spirits.

In these rituals are defined the essential beings of the Indian's pagan religion. There is the Great Spirit, represented by Father Sky or by the sky's great incarnation, the Sun Father. There are Mother Earth and her daughter, the Corn Mother. There are the intermediaries between the powers below and those above, including the birds, and the great mythic Thunderbird, the winds and the clouds, and the celestial bodies. There are the Elders, or Guardians, of the animal kinds, who replenish the earth with game and come as helpers to the huntsmen; and there is a vast congeries of things potent, belonging both to the seen and the unseen world, whose help may be won in the form of 'medicine' by the man who knows the usages of Nature.

All that was vast and inexplicable — thunder-clouds, lightning, and whirlwinds; rainbow, eclipse, and meteor; the rise and decline of the morning and evening star and the constellations — stimulated primitive imagination and is registered not only in cosmology and mythology,

but in symbols on the Indian's works of art and his religious paraphernalia. Life with him is not divided into compartments, organic and inorganic; human, animal, and material. 'Among the Indian's deepest convictions is his belief that the whole environment of physical life is one of strength-imbuing powers only thinly veiled from sight and touch.' The Sun Father, coming up and traveling across the sky daily, personified the benign source of life and heat and energy. The Earth, the fructifying mother, from which all growth arises. From these two the Indian derived all that exists, and the life that animated them must therefore animate the whole universe.

The unity of the life principle and the duality of its origin formed the inevitable basis of the Indian's religion, and religious conceptions are the key to his whole existence. Dr. Edgar Lee Hewett goes so far as to say that 'their industries, their art, social structure, government, flow in orderly sequence from their beliefs concerning nature and deific power. . . . Their religion in its essence is almost what modern science has attained to — the conception of God and Nature as one.'

Descended from the Sky Father and the Earth Mother are numerous gods of varying powers. J. W. Powell in describing the religion of the Zuñis picturesquely says:

> Their gods, like those of all primitive people, are the ancients of animals. . . . All entities are animals — men, brutes, plants, stars, lands, rocks, waters — and all have souls. The souls are tenuous existences, gaseous creatures inhabiting firmer bodies of matter. They are ghosts that own bodies. They can leave their bodies, or if they discover bodies that have been vacated they can take possession of them. Force and mind belong to souls; fixed form, firm existence belong to matter, while bodies and souls constitute the world. The world is a universe of animals [animated beings]. The stars

HENRY CHEE-DODGE, CHIEF OF THE NAVAJOS

HENRY CHEE-DODGE IN FRONT OF HIS MEDICINE HOGÁN

are animals compelled to travel round the world by magic. The plants are animals under a spell of enchantment. Lakes writhe in waves, the sea travels in circles about the earth, and the streams run over the lands. Mountains and hills tremble in pain, but cannot wander about; but rocks and hills and mountains sometimes travel about by night.

Since all animate beings in the hierarchy of gods and nature-spirits have powers in varying degrees, the religion of primitive men is 'an organized system of inducing the ancients to take part in the affairs of men, and the worship of the gods is a system designed to please the gods, that they may be induced to act for men, particularly the tribe of men who are the worshippers.'

The Indian conceived what seems to us a sort of Wonderworld in which the spirits were intimately related to each other and in which all behavior was religious, in the sense of being related to the gods. These beings, though unseen, must dwell somewhere, and so the Indian conceived regions suitable for them and consistent with the known world of his experience. The scheme as briefly described by Alexander, is as follows:

> There is a world above, the home of the Sky Father and of the celestial powers; there is a world below, the embodiment of the Earth Mother and the abode of the dead; there is the central plane of the earth, and there are the genii of its Quarters. . . .
>
> A few tribes recognize a creator who makes, or a procreator who generates, the world and its inhabitants; but the usual conception is either of a pre-existent sky world peopled with images of the beings of an earth world yet to come into being, or else of a kind of cosmic womb from which the First People were to have their origin. . . .
>
> Uniformly, the next act of the world drama details the deeds of a hero or of twin heroes who are the shapers and lawgivers of the habitable earth. They conquer the primitive monsters and set in order the furniture of creation; quite gen-

erally, one of them is slain, and passes to the Underworld to become its Plutonian Lord. The theft of fire, the origin of death, the liberation of the animals, the giving of the arts, the institution of rites, are all themes that recur again and again. . . . Universal, too, is the cataclysmic destruction of the earth by flood, or fire and flood, leaving a few survivors to repopulate the restored land. Usually this event marks the close of the First Age . . . in which people are either animal in form or only abortively human. After the flood the animals are transformed once for all into the beings they now are, while the new race of men is created.

The Pueblos have an elaborately developed symbolism connected with the World Quarters, the Above and the Below. Their ancestors are supposed to have come from the Underworld through a Place of Emergence, Si-pa-pu, and journeyed to the Middle Place of the World, which is located in different spots by the different tribes. Each of the six regions — the four cardinal points, the Zenith and the Nadir — possesses its symbolic color, which may, however, vary in different pueblos. Among the Hopis white is the color of the east, blue of the west, red of the south, and yellow of the north. Black signifies the Nadir and all colors the Zenith. Similarly the elements are associated with the points of the compass: the earth with the east, water with the west, fire with the south, air or wind with the north. 'In their rituals,' says Professor Alexander, 'the Zuñi address the points in this order: prayer is made first to the Middle Place, then to the North with whom is the breath which is the prime essential of life; to the West whose rain-laden clouds first break the hold of winter; to the South, the East, the Zenith, the Nadir which holds in its bosom the caverns of the dead, and once again the Middle Place.'

The Higher Powers venerated by the Pueblos consist of two classes: gods which represent the powers of

Nature and Kachinas which stand for the ancestral spirits or for magic powers. The gods are of many grades of power: the higher ones — Sun, Moon, stars, constellations, with the meteorological beings and the cloud-masked rain-bringers — are the superior gods. Below these the 'dwellers in the bosom of Mother Earth include the twin gods of War, the Corn Father and the Corn Mother, and the mineral beings representing Salt, Red Shell, White Shell and Turquoise; as well as the animal-gods, or Ancients, which are the intermediaries between men and the higher gods and which act also as the tutelaries or patrons of the several fraternities.'

'The second great group of higher powers is composed of ancestral and totemic Katcinas. . . . The number is very great, for every clan has its own. . . . In general the Katcinas are anthropomorphic. In ritual and in picture they appear as masked and to their representation is due the long series of masques which characterize Pueblo ceremonial life.' Pueblo maskers personate many other divine and mythological beings and, besides masks, employ many other symbolic and sacred objects: prayer plumes, altars, sand paintings, images. In connection they use meal and pollen seeds, native cotton grown for sacred usage, maize of the several colors, tobacco cigarettes, and stone fetishes.

There are several terms used in relation to religious leadership and magical knowledge which cannot be distinctly defined. Priests, shamans, and medicine men are often confused and their powers certainly overlap among the different tribes. Alexander classifies them as follows:

Priest. One authorized to preside over the celebration of traditional ceremonies. Such persons must be initiates in the society or body owning the rites, which are sometimes shamanistic in character. . . .

Shaman. A wonder-worker and healer directly inspired by a 'medicine power' . . . shamanism signifying the recognition of possession by powers or spirits . . . essential in all relations between man and the world-powers.

Medicine Man, Doctor. Not radically different from shaman, though the employment of naturalistic methods of healing, is often implied. . . .

Every degree of relationship is found for these offices.

Among the Pueblos, the priest is held far above the medicine man, who may be simply a doctor, or medical practitioner, or who may even be a witch or wizard. In any case the priest is the representative of the people, to lead the ceremonials and to be the keeper of the sacred objects and rituals. The priesthood is sometimes so highly developed as to give them control of the civil and military branches of the tribe. Swanton declares that among the Zuñis 'the two head priests of the bow and the rain-priests of the six cardinal points form the fountain head of all authority and the court of last appeal.'

The term 'medicine' is now generally applied to objects and practices used to control the animated powers of Nature. 'It is a sort of magical property. It may exist in the form of a song or spell known to the owner, in the shape of a symbol, with which he adorns his body or his possessions or in the guise of a material object which is kept in the medicine-bag, or in the sacred bundle. It may appear in a medicine-dance or ceremony.'

The shaman's varied duties as intercessor with the spirits, interpreter of mysteries, and, on occasion, healer of physical ills, gives him great power if exercised by an astute personality. Beset with a thousand fears, the ordinary Indian naturally thought it more important to placate the spirits of evil than to worship the greater gods, and his ceremonies, though designed to gain favor, are even more intended to ward off evil.

Indians have a sincere belief in witchcraft and demoniac possession, and one of the most terrible accidents which can happen to a man is to 'lose his soul.' He conceives of it as his 'living part' and believes it capable of being separated from the body and of living after death. It may at times be visible to a shaman, and in mythology and art-craft it is symbolized by the butterfly or the owl. This breath-body is not subject to the will of the person it inhabits and it may be damaged or destroyed. Witchcraft often consists in stealing or damaging the living part. It is the business of a skillful shaman to bring it back — he may even visit the world of ghosts in a trance to bring it back to its owner. The Hopi village of Awatobi was destroyed by its Hopi neighbors in 1700 because it was believed to be bewitched by the Spanish Mission Fathers. Somewhat different is the idea of enchantment where a 'spell' is laid upon some person or natural object. There is a legend that the Powamu Ceremony, now celebrated in February, was undertaken to relieve the land from the bewitchment of winter.

As an accompaniment of organized and ritualistic religion, there is among Indians the practice of *tabu*. Certain things may not be touched or eaten at special times and by particular persons, under penalty of evil results. For instance, it is forbidden to eat the flesh of the animal from which the clan name is taken — the Navajos may not eat bear meat, and the Zuñis may not eat fish or anything that lives in water. Symbols also play an important part in the sacred practices. The swastika, probably derived from the points of the compass and the four winds, is only one of many uses of the sacred number four which appears so frequently in Pueblo mythology and ritual.

In all that has been said concerning the gods and the

kachinas, the spiritual unity of all animate life, the personification of nature, and the correct conduct for attaining favor with the gods, no reference has been made to morality as their object. The purpose of religion in the mind of the Indian is to gain the favorable, or to ward off the evil, influences which the super-spirits are capable of bringing to the tribe or the individual. Goodness, unselfishness, truth-telling, respect for property, family and filial duty, are cumulative by-products of communal living, closely connected with religious beliefs and conduct, but not their principal object. The Indian, like other people, has found by experience that honesty is the best policy among friends and neighbors, but not necessarily so among enemies; that village life is only tolerable on terms of mutual safety of property and person; that industry and devotion to the family interest make for prosperity and happiness. Moral principles are with him the incidental product of his ancestral experience, not primarily inculcated by the teaching of any priest or shaman. Yet the Pueblos show a great advance over many primitive tribes in that their legends and their priests reiterate constantly the idea that 'prayer is not effective except the heart be good.'

CHAPTER XXIII

THE ANCIENTS AND THEIR ORIGIN

From the time when white men discovered this continent, they asked themselves: Whence came these Indians? Are they the descendants of prehistoric races whose communal villages and remains are to be found everywhere in North America? Are they of the same stock as the ancestors of the mound-builders of Ohio, the cave-dwellers of Kentucky and Utah, and the cliff-dwellers of the Southwest whose entire area is strewn with thousands of buried and abandoned communities? As more and more of these are uncovered, the questions concerning the origin of the prehistoric men who built them and of their relation to other races of men have become more exciting, until in the twentieth century many highly trained scientists are concentrating their efforts upon the answers to these problems.

Many theories, some of them perhaps scarcely more than guesses, and others based on inadequate knowledge of racial and geological history, have been offered. Some have thought that the dwellers in caves, cliffs, and ruined pueblo communities were of a wholly different people from the living Indian; but with each increment of knowledge gathered by archæologists and excavators, it has become more certain that the prehistoric peoples and the modern remnants are one race, in process of cultural development and decline.

In so brief an account of the Amer-Indian, it is impossible to review the accumulated evidence concerning their origin. It must be sufficient to say that at the moment there are two main schools of serious thinking.

One holds that all of the native inhabitants of the Western Hemisphere are of the Indian race and that this race originated on the American continent and differentiated thousands of years ago into the varied stocks and tribes now found in North, Central, and South America. 'If man evolved from some lower form or was created, in Asia, Europe, or Africa, if he has always been indigenous to any or all of those countries, why should he not have originated in America as well?' asks A. Hyatt Verrill, and then continues:

> The only tenable argument against this hypothesis is the fact that up to the present time no remains of extremely ancient ape-like or semi-human beings, such as have been found in the Eastern hemisphere, have been discovered in America. . . . Regardless of the original source of man in America, there is no doubt that he has been here for an immeasurable length of time. . . . I am convinced that the Indian originated in America, although he was probably influenced by and became mixed with migrants from Asia, Malaysia and Europe.

On the other hand, the theory supported by the majority of American scientists, though varying in minor details, is that the Indian of the Western Hemisphere is of Asiatic origin, either Mongolian or Mongolian and Malay. Their reasoning is based on the fact that no preglacial remains of ancient man have been discovered here. Asia affords the nearest land, and the physical characteristics of many Indians are somewhat similar to those of the people of northeastern Asia. It is supposed that wandering bands of Asiatic savages, driven out by overpopulation or economic scarcity, or lured on by better hunting and fishing, crossed what was once a land bridge over Bering Strait thousands of years ago, migrating onward gradually and through a long period of time. Dr. Clark Wissler thinks that 'they probably brought with them the fire-drill, stone chip-

ping, twisting of string, the bow, the throwing-stick, the harpoon, basketry and nets, hunting complexes, cooking with stones in vessels of wood, bark, or skin; body painting and perhaps tattooing, and the domestication of the dog.'

Some geologists have thought the land bridge did not exist during the time when primeval man may have come to America, and others that a migration by way of the Aleutian chain would be impossible; but Dr. William H. Dall thinks it eminently probable that 'the migration took place when the culture of the invaders was sufficiently advanced for them to be able to cross the Strait in canoes, or, like the Esquimo, they may have, during glaciation, followed marine mammals, the walrus and the seal, along the edges of immovable ice floes closing the Strait perhaps for some centuries.' James E. Gridley admits the existence of a land bridge at the close of the last glacial epoch, which probably continued up to comparatively recent times, as indicated by the close resemblance of related living mammal species on either side of the present Bering Strait; and he infers, therefore, that the first men found their way into North America at some time near the close of the existence of the last land bridge.

Describing this infiltration, Dr. Hrdlicka, of the United States National Museum, says:

> Man does not migrate like birds — he spreads. He is gregarious, and he is a creature of habits, one of the strongest of which is attachment to his home, whether the limited site of a sedentary community or the larger territory of a nomad tribe. He will move only because of compulsion, such as may be caused by enemies, some calamity, or the exhaustion of resources; or because of better prospects ahead in the way of climate or food. He cannot be supposed to have reached the colder northeastern limits of Asia before the warmer, richer or more available parts of that continent were settled or hunted

over; and he could not have reached America, of course, before all this took place. We are able then to establish one definite landmark in reference to the time of the beginning of the peopling of America; it could only have followed that of Asia. . . . All this leads to the strong presumption that the beginning of the migration into America did not take place before the time of the European late Paleolithic or earlier Neolithic period which, reduced to years, would be somewhere between possibly ten or at most fifteen, thousands of years ago.

If it be granted that the migration came by way of Bering Strait or the now vanished land bridge, there are still many unreconciled facts which point also to migrants from the Polynesian Islands and of Malay stock. 'Many of the Central and South American tribes,' says Verrill, 'are far more Malaysian or Polynesian than Mongolian in appearance. In customs, dialects, beliefs, and arts they are totally distinct from either our northwestern Indians or the Asiatic tribes. . . . How did it happen that Indians of Central and South America attained a high state of culture and a creditable civilization totally distinct from anything Asiatic, while the aborigines farther north, and in an environment far better adapted to their ancestral life and development, remained largely uncultured?' Verrill thinks it not unreasonable to suppose that there have been many migrations to America from various parts of Asia, Malaysia, Polynesia, and Europe.

Asiatic junks, Malaysian proas, and the Polynesian canoes are all seaworthy craft and could make the voyage across the usually calm tropical Pacific. If Atlantis was a fact and not a fancy, the Indians of the tropical eastern seaboard might be descendants or refugees or voyagers from that lost continent; or the natives of southern Europe might have crossed the Atlantic and settled in America ages before Leif Ericson ventured to our shores.

In answer to the fact that no remains of prehistoric

man, such as have been found in Europe, have been unearthed on this continent, Verrill declares that this does not prove that they may not yet be found. After rehearsing many apparent contradictions of the Asiatic theory, he concludes:

> Finally, and perhaps most important of all, is the fact that no American tribe possessed a knowledge of the wheel. . . . One would think it would have been impossible for the Indians to have avoided discovering the wheel. We would suppose that a disk of wood or other material, a plate or dish, falling and rolling on edge would have suggested the idea. . . we can only surmise what heights of civilization might have been attained by the Mayas, the Incas, or the Aztecs, had they hit upon this labor-saving key to all mechanical devices.

Other ethnologists, much less determined on either theory, agree in the main with Dr. W. H. Holmes, that

> through this gateway [Bering Strait] at one period or another the main currents of incoming people have passed, but the time may have been long and the racial elements diversified. . . . If the cradle of the human race was in the Old World, the American race would consist of such elements as happened to find their way to the uninhabited Continent; if in very early times, the elements might be derived from some paleo-Asiatic or other early race not now in evidence; if later, they might be one or more of the known races of the cradle continent; if more than one, there would be plurality of racial elements in the American composition; if only one, the condition known as unity would prevail. . . . I agree fully with Dr. Hrdlicka that Asiatic peoples must have furnished the great body of immigrants to America.

But with every passing season, new explorations and discoveries bring additional evidence supporting one side or the other of the Indian origin controversy. Roy Chapman Andrews, of the Third Asiatic Expedition, asserts that there was unquestionably a land connection between the Pacific Coast and Asia, shown not only by

the evident relation of the prehistoric people of Mongolia to the American Indian, but also by the redwoods found in limited regions of North America, which grew abundantly some three million years ago in what is now the Gobi Desert of China. Very recent discoveries in the Pacific States, particularly the carvings of the dinosaur, the imperial elephant, the ibex and man, on the walls of Havasupai Canyon in Arizona, and of petrified footprints of the dinosaur on the stone floor of the Painted Desert, seem to compel a readjustment of time computations. 'It might seem that man on the Pacific slope goes back a lapse of time estimated at twelve million years to the period of the dinosaurs, or that dinosaurs existed on the Pacific slope down into the stone age of man, estimated to have been not more than fifteen thousand or twenty thousand years ago.'

It is clear that the latest discoveries and opinions assume a vastly greater lapse of time since mankind came into North America, and during which he spread and developed his prehistoric cultures, than has hitherto been thought possible.

This difficulty Professor Pliny Earl Goddard thinks has quite recently been given an entirely new aspect:

> That human beings were living in North America during Pleistocene times is no longer open to doubt. Worked flints lying in undisturbed Pleistocene formation under a fossilized skeleton of an extinct species of bison, must mean that men were living in Texas at that period. . . . Linguistic evidence has been in existence for nearly a century which made the peopling of America in recent times improbable. Such great diversity of speech calls for many millenniums. The cultural evidence is in the same direction. The land bridges were almost certainly in the North and in all probability at the Northwest, that is, Bering Strait. Crossing there is now possible for men in small boats or in winter on the ice. . . . The whole conception is and has been fantastic, for the time al-

lowed was much too short. . . . Other mammals have survived from Pleistocene times with little change, why not man?

The second objection has been that man must have come with a Neolithic horizon and the Neolithic horizon in France is post-glacial. . . . But at last we know that man was here in Pleistocene times. The period that has been assigned must be doubled at least and probably multiplied by ten.

How shall we readjust our theories? Man came across with the other mammals of Old World origin: the horses, the camels, the elephants, when there was an ample land bridge and when both Siberia and Northern America were enticing in climate and sources of food. When the ice advanced if not before, men and the other animals moved toward the south and due to a great reduction of exposed land, they were perhaps forced to cross into South America. During the last glaciation these people were confined to the tropics where they were compelled to seek and increase their food supply. . . . Just south of the ice in North America man hunted bison and probably caribou; while to the south other animals and men, who if not already agricultural were accustomed to the more temperate regions, remained behind. The withdrawal of the ice produced a migration toward the north.

Whenever and wherever prehistoric man arose in North America, it is now believed that during these undetermined ages he drifted gradually over the whole continent and multiplied slowly under the conditions of new environments. The variations of climate, vegetation, and animal life caused increasing differentiation of tribes and languages.

Let us assume with Professor A. V. Kidder[1] that the earliest aborigines of the Southwest were 'a more or less nomadic people, thinly scattered over the country, ignorant of agriculture and pottery-making.' Their life must closely have resembled that of the modern Digger tribes of the Plateau; that is to say, 'they dwelt in more or less makeshift houses, and subsisted principally on

[1] The material on pages 211–15 is a very brief digest of the tentative conclusions of A. V. Kidder, in his *Introduction to Southwestern Archæology* (1924).

small game: rabbits, prairie dogs, and doves; and on such wild vegetable products as grass-seeds, berries, and roots. . . . Whoever they were, there could not have been many of them, for the natural food resources of the Southwest were probably, even in ancient times, not sufficient to support more than a very small population. Remains of these aborigines have not yet been discovered.'

In the course of centuries the aborigines obtained seed-corn and perhaps learned a primitive kind of agriculture from the more highly developed tribes of the South, probably at least fifteen hundred to two thousand years ago. The earliest of them whose community remains have been discovered are called the Basket-Makers, who made basket utensils, and grew a very primitive type of corn which they stored in caves and caches under cave floors. Their fine basketry and implements and elaborately woven sandals have been found in many sites in northeastern Arizona and southwestern Utah. It is believed that many other sites exist which will in course of exploration be uncovered.

The Basket-Makers came to depend on corn for food, and thus ceased to wander so widely; they invented pottery utensils, or possibly learned from the Indians of the South how to make them, and to build larger and more permanent dwellings, to wall them with stone slabs and to roof them with poles and brush. The *post*-Basket-Maker ruins are more widely scattered than the communities of their forbears and they seem to have slowly developed their arts through a long period of time. The skulls of the Basket-Makers and their immediate successors are long-headed (dolichocephalic) and undeformed. But now appear among the ruins the remains of a people, obviously later, whose skulls are flattened at the back, and with them are found the bow

and arrow and cotton materials. This suggests the arrival in the Southwest of a new race, with broad heads, who seem to have adopted the agriculture, the pottery, and the house types of the native *post*-Basket-Makers.

These later people spread over the whole San Juan country — that is, over the region of the Four Corners, where Arizona, New Mexico, Utah, and Colorado come together — as well as along the Rio Grande, the Little Colorado, and the Gila. Their ruins, generally referred to as 'Pre-Pueblo,' being nearer the surface, nearer in point of time and more highly developed as to culture, are easily identified. Their houses are more solidly built, more drawn together, and generally aboveground; there is a rudimentary type of kiva, and they made black-on-white and neck-coiled pottery.

The three successive types of progressing peoples thus far described are fairly distinct and bring us within sight of historic times. But between the pre-Pueblo ruins and the modern pueblos lie a vast number of small ruins scattered over the Southwest, which must be accounted for. Their buildings are characterized by horizontally coursed masonry or adobe, and closely grouped rectangular rooms, and contain both corrugated and black-on-white pottery. Professor Kidder calls them 'Early Pueblo,' intermediate between the ancient and the modern settlements of the Southwest; and believes that their culture spread far beyond the original point of diffusion in the San Juan District to the outlying semi-sedentary tribes.

Between the earliest Basket-Makers and the arrival of the Spaniards in the sixteenth century — a span of fifteen hundred to two thousand years — the Pueblos reached their so-called Great Period, approximately five hundred to one thousand years ago, when their

population was numerous and prosperous, and their arts reached a higher standard than the moderns can show.

With every ruin that is excavated new evidences are found, upbuilding, correcting, and revising the archæological picture of the prehistoric life and works of the tribes of the Southwest. If the Early Pueblo reached its highest expression from five hundred to a thousand years ago, it is of the utmost interest to know why it began to decline and continued to lose population and to degenerate in achievements down to the twentieth century. Agriculture, architecture, pottery were all of a high order, the tribes were prosperous and increasing in numbers, yet they began to abandon their outlying communities and to concentrate in fewer sites.

Two main reasons have been given for this movement: climatic change — that is, increasing aridity — and the attacks of the nomadic tribes of the Great Plains, the Rocky Mountains, and the Northern Plateau. The agricultural tribes must always have had trouble with the wild peoples, who would rather steal corn than arduously raise it. This would naturally compel the small farmers to move into communities larger and better defended against the raiders. The theory of the progressive drying-up of this region has less to be said for it: 'the bulk of the evidence now available seems to indicate that as far back as the time of the Basket-Makers the climate was much the same as it is to-day.'

Whatever the causes, there is a probability that the people of these larger and highly developed localities, like Chaco Canyon, the Mesa Verde cliff houses, the canyon head fortresses, as well as the imposing cliff dwellings of Kayenta, developed a community interest and coöperation.

Professor Kidder continues:

Life was not too easy, yet not too hard. They had reached that vital moment in their history when opportunity and necessity evenly balanced. Yet in spite of all they could do the people of this region were finally forced to give up the struggle . . . eventually Chaco Canyon was abandoned; then the Mesa Verde; lastly the Kayenta Plateau; and from that time on the San Juan ceased to play a significant part in Pueblo history. . . . Their abandonment can hardly have been much later than 1100.

Shortly afterward began the abandonment of the settlements of the Upper Gila, the Lower Gila, and the Chihuahua Basin, and the process of concentration went on with diminishing population, probably chiefly due to pressure from the nomads. The migration stories of the Hopis and the Zuñis tell how they received new additions both from the north and south.

The dispersion was disastrous to their culture. The fine old styles of pottery gradually became extinct or declined in quality, or a mixture of the old and the newer types of the communities with which they had coalesced was adopted. A steady shrinkage in their territories and numbers seems to have gone on up to the very time of the arrival of the Spaniards. 'The upshot of it was that in 1540 the entire population was gathered together in sixty or seventy towns strung out along the Rio Grande from Socorro to Taos, and running westward in a narrow interrupted line through Ácoma and Zuñi to the Hopi villages.'

It must not be overlooked that they had progressed far not only in arts, architecture, and agriculture, but also in government, for through all these centuries they kept 'the essential democracy of primitive life . . . they were neither very rich nor very poor, every family lived in the same sort of quarters, and ate the same sort of food, as every other family. Prominence in social or religious life was to be gained solely by individual ability and

was the reward of services rendered to the community.'

All the data thus far gathered, upon which the foregoing outline is based, come from excavation of ruins, study of artifacts, and correlation of these with geological history; but, as has been already stated, the time factor is still very vague. Quite recently a new method of determining chronological sequence has been devised by Professor A. E. Douglas, in his tree-ring studies. He has shown that 'irregularity of growth, conditioned by irregularity of rainfall, is clearly and accurately recorded in the width of the annual rings of trees.' He has further proved that all, or practically all, the trees of the whole district will register in exactly the same way. By comparative study of living trees and the roof-beams from ancient ruins, he has determined when the beams were cut, and ultimately it is probable that 'we shall be able to make out the exact order of erection of many of the great Mesa Verde cliff houses, and even determine the relative date of building of parts of structures.'

As yet there is no way of determining the dates of the Basket-Makers period, and the great gap reaching backward and southward between them and the Maya culture of Yucatan remains to be filled in. But the tree-ring studies of the timber of the Southwest and of the giant Sequoias of the Coast, and correlation with the known chronology of the Mayas, afford promise of an ultimate definition also of Southwest chronology. Toltec sherds have been found in the ruins of Pueblo Bonito at Puyè, indicating that there was an exchange of pottery in trade long ago between the far South and the region of the Upper Rio Grande.

Although so much remains to be known and to be revised, Professor Kidder believes there is no doubt that these problems will be solved so 'that in the end we

shall be able to reconstruct with surprising fullness the history not only of the Pueblo culture in its perfected form, but also that of the early cultures from which it originated . . . thanks to the dry climate of the Southwest, the material is remarkably well preserved. I know of no other area in the Americas, with the possible exception of Peru, where all the steps in the development of a people from nomadic savagery to a comparatively high degree of civilization, can be traced so accurately with such a wealth of details.'

The layman, when scientists so frankly say that their conclusions are tentative, must await new evaluations of these discoveries and fresh interpretations which only a mass of digested opinion can make final and acceptable. Yet the traveler as well as the explorer must be thrilled and his imagination expanded by the visualization of prehistoric history and the thought of the Dawn Man progressing from instinctive to conscious cultural development. It enriches life enormously to think of every broken sherd and weapon, every ruined tower and kiva, the pictured rocks and the sculptured shrines, as fragmentary evidences of the struggle of the human spirit on its way to higher manhood.

PART VI
THE NOMAD APACHES

Apachedom is a vast wilderness, and largely a vast desert . . . a desert, truly, and a fearful one. Yet it is not a vast and level sea of lifeless sands. It is, on the contrary, a raggedly mountainous country; and though the sands are plenty, they do not dominate the landscape. Upon a vast, burnt-out plain, of undulant smoothness, a multitude of wild peaks seem to have been flung down superficially and haphazard. It is one of the features of that unearthly landscape, that the mountains appear not to have grown from the bosom of the earth, but to have been superimposed. There are not more cruel and inhospitable peaks. Unkempt and dead and shaggy with sharp crags and sharper cacti, they grin down upon the circumfluent plain, by five hundred feet to as many thousands. . . .

The intervening valleys are equally characteristic. Melting in intangible slopes, with the hazy smoothness of the Southwest, accurst as the Sahara, thirsty as death on the battlefield, nature has yet painted them with meretricious gaudiness. After a week of rare rains, you shall find square leagues carpeted with Etruscan gold of fragile Escholtzias, the snow of dainty marguerites, the blood-red blotches of the *nopal*, and the varying hues of many another flower. The gray-green of the sage-brush, the greasewood's glaucous green, the emerald daggers of the amole, the duller-hued bayonets of the aloe, topped with a banner of waxen white — these are everywhere. And hither and yon tower the giant candelabra of the Zuhuaro.

CHARLES F. LUMMIS

CHAPTER XXIV

APACHE WARS AND WARRIORS

Of all the Indians of the Southwest the most warlike in modern times were the Apaches. The name itself, a Zuñi word meaning 'enemy,' adopted by the Spanish explorer Oñate in the sixteenth century, has remained a name of terror down to our own day. Yet this was doing them, as a people, much injustice, since, far more than other tribes, they varied among themselves in fighting qualities and in their ability and desire to assimilate civilized habits.

Being altogether nomadic, they were democratically organized into bands under a war chief. Explorers, scouts, Indian fighters, rangers, and pioneers, knowing almost nothing of their peculiar character, called each of the bands with whom they came in contact by the locality or by the mountains or hidden springs to which they fled when pursued, or by some conspicuous characteristic. The Coyoteros were 'Wolf Men,' and the Mescaleros who roasted mescal in pits were named for this peculiarity. But the Tontos, the Chiricahuas, the Cibicus, the Ojos Calientes were named from the ranges they frequented when not at war; and these names were not always the same even among the whites.

The confusion has been further increased by the fact that among the Apaches, young Indians frequently left one band and joined another more congenial to them. Although all spoke the same language they were divided, says Scout Tom Horn, 'according to their dispositions.' Thus a bad Tonto would leave the Tontos and go to the Cibicus or the Chiricahuas, and the timid Chiricahua

would join the Tontos. So at the time of which he was writing (1877), 'you could find a good Indian or a bad one by knowing what band he belonged to.'

Chief Pedro, camped at the junction of the White and the Black Rivers in Arizona, when appealed to for assistance in subduing his fellow tribesmen, told Chief of Scouts Al Sieber that all Indians were not bad — some were as good as any men on earth; but that he had six hundred warriors some of whom were as bad as an Apache could be, and that he could not do anything with them. 'You see, they are part devil,' said Chief Pedro, 'or they would get old or get killed sometime!' He advised the first Military Agent stationed at San Carlos 'to go kill off all the bad, turbulent Indians,' and offered him two hundred warriors to help do it.

For centuries the Apaches were roaming from the plains of eastern New Mexico and Texas west of the Pecos River to the Border and far south into Mexico. Here and there in the Chiricahuas, the Chisos, and the eastern mountain ranges they had established rancherias at springs where the women and children raised corn and hid out, while the men went afar hunting game and wild horses or raiding the Mexicans and the Pueblos along the Rio Grande. In this Indian country, just before the Mexican War, a few military posts had been set up by the United States Government, to afford some slight protection to immigrant settlers. As the population of the Southwest grew rapidly after 1849 because of travelers lured westward by the gold discoveries in California, the Apaches were driven to fury by the sudden invasion of their ancient ranges. They had lived on game, wild seeds and fruits, but chiefly on wild horse meat, and they would starve unless they could follow the droves of wild mustangs, which were to them what the buffalo were to the Indians of the northern plains.

From this time on, the settlers in the Apache country repeatedly demanded protection from the Government. Military outposts were strengthened and there arose a state of almost continuous warfare between the most ferocious bands of the Apaches — the Chiricahuas and their allies the Mescaleros — on one side, and the white invaders and their military defenders on the other. Whenever pursued by the United States infantry, the Mescaleros could always take refuge in their mountain fastnesses, or across the Mexican Border in Chihuahua, where the troops were not permitted to follow them.

Although during the Civil War the energies of the Nation were chiefly employed in the Eastern and Southern States, the protection of the Territories of Arizona and New Mexico became a necessity. California troops were ordered to cross the western deserts to subdue the Navajos and the Apaches and, at the same time, to hold New Mexican territory against the Confederates. The Navajos, close kindred of the Apaches, had broken their treaties with the Government repeatedly, and eight thousand having been rounded up in a striking and ruthless campaign under Kit Carson, they were exiled to Bosque Redondo, Fort Sumner, and kept there in exile for four years. At the same time fifteen hundred of the wildest Apaches were also brought in by the California troops and kept at Fort Sumner as prisoners.

We owe most of our knowledge of Apache character and methods of warfare to the army officers of this period, notably John C. Cremony, United States interpreter and later Major of California Volunteer Cavalry, who was a scholar as well as a military officer. He learned the Apache language, and during his period of service accumulated a mass of interesting data concerning these dramatic and difficult tribes.

Although the Navajos and a considerable body of

Apaches were guarded on this reservation at Fort Sumner during the Civil War as punishment for their raids on settled communities, the warrior bands of the Southern Apaches fled to Mexico and were unsubdued. After the war the Government reinstated the Navajos on their present reservation, and in the eighties established reservations for the peaceful sections of the Mescaleros and Jicarillas, and, by issuing rations to them and appointing agents over them, attempted to keep them within bounds.

But with the adoption of the reservation policy new troubles with the Indians arose. Some of the profiteering agents to whom was assigned the business of distribution, sold portions of the Indian supplies to white settlers; and arbitrarily withheld from the Indians part of their annuities to satisfy damage claims brought against them by white settlers. The Indians were given no opportunity to defend themselves against these claims and thus acquired a just grievance against the Government. The Commissioner of Indian Affairs, J. C. Calhoun, himself declared that 'the Government had no legal right to take one dollar out of the Indians' annuities without their consent.'

If the Apaches had been of a type to engage white sympathies or if they had shown signs of adapting themselves to the changes inevitable upon white settlement, it is barely possible that some consideration might have been given them. But their atrocities and their predatory habits infuriated the whites, who regarded them as hopelessly savage and therefore to be exterminated. To these mutual hatreds and injustices were added the chaotic conditions arising from the inability of military commanders and settlers to agree upon methods of dealing with the hostiles. Government mail trains were frequently attacked, mules and cattle driven off, leaving

employees with their stores afoot in a barren and hostile region. At the same time the Government paid the settlers millions in indemnities for cattle and other property carried off by the Apaches.

The last quarter of the nineteenth century is filled with the vain and tragic struggle of the hostile members of the Apache bands who refused to stay on the reservations assigned to them; and of the no less fearful flights, murderous attacks, and losses endured by the white settlers and immigrants. The message, 'The Apaches are out!' when the warriors broke from the reservations and resumed their raids, was carried from one lonely settlement to another and came to be filled with horror for peaceful Indians as well as for the whites.

In spite of United States troops and Texas Rangers, a succession of Apache chiefs defied and outgeneraled their pursuers. Mangas Colorado, who had pledged friendship to the Americans when General Kearny took possession of New Mexico in 1846, thought his people, the Mimbreños Apaches, had been mistreated; and when he himself was bound and whipped by the miners of Santa Rita, he gathered a fighting band and became the scourge of the white settlements of eastern New Mexico for fifteen years, until he was killed. Chief Alsate, of the Chisos Band, harried along the Texas Border until his people were conquered and enslaved by the Mexicans. He died in hiding in the Chisos Mountains in a cave still called by his name and thought to be haunted by his ghost.

Among the Chiricahuas, the fiercest of the fighting bands of Apaches, at least four great names deserve to be mentioned. Cochise, at first not an enemy of the whites, is said to have gone in 1861 under a flag of truce to the camp of a party of American soldiers to deny that his tribe had abducted a white child. The com-

manding officer, angry because they would not confess to the crime, seized and bound the chiefs; one was killed, but Cochise, though wounded, escaped, and immediately began to avenge his companions who had been hanged by the Federal troops. He joined with the followers of Mangas Colorado to harass the settlers during the Civil War, but finally surrendered. In 1872, when his people were moved to the new Tularosa Reservation, he fled with several hundred of them, but ultimately came in to the Chiricahua Reservation to die in peace.

Victorio, the ablest of the Chiricahua chiefs, whose fighting band contained many Mescaleros as well, led the lawless Apaches during the early eighties. By military officers of that period he was regarded as far the best strategist of his tribe; and indeed, Major McGonigal declared he was, with the exception of Chief Crazy Horse, of the Sioux, the greatest of all Indian generals. Victorio knew his country and just where to find wood, water, grass, and abundance of game. He knew that the United States troops could not cross the southern boundary in pursuit, and thus all he had to do was to cross into Mexico when it was desirable to escape. Every time his people were moved from one reservation to another, he fled with his restless and resentful followers and went again on the war-path. He was finally killed by Mexican troops in Chihuahua, where the people had suffered from Apache raids from time immemorial.

Geronimo, the last great leader of these warrior Chiricahuas, was perhaps the most treacherous and plausible of all. Scout Horn describes him as an extraordinarily eloquent talker: 'When he sent in word that he wanted to talk, he always said he wanted to talk "Peace!" When there was war to be made, he never had anything to say, but just went to war; but he could stay on the war-path only so long, and then he would get all filled

up with talk and would send to the Government to get some one to talk to.' While a council with the officers was going on at great length, his young warriors would frequently be out stealing from the Mexicans the horses they intended to take back to the reservation, against the time when they would again go out on the war-path.

Between 1876 and 1886, in the intervals of seven major flights from the reservation, Geronimo and his band were tilling their little farms, making 'tizwin' — the Indian intoxicant — and drawing rations.

American troops under General Crook, with vast hardship and expense, again and again brought back the renegades, and, finally, General Miles, succeeding Crook in command, rounded up the band of three hundred and forty under Geronimo and deported them as prisoners of war to Florida. Later, they were moved to Alabama, and finally to Fort Sill, Oklahoma, where Geronimo died in 1909. The story of Geronimo is a chapter of Indian history by itself. He possessed an amazing combination of the outstanding characteristics of his band: treachery, subtlety, and persuasive powers of oration which enabled him often to outwit by mere argument his white enemies.

The murderous and unreliable qualities of these particular fighting bands of Apaches were not wholly due to innate savagery, but in part to a vacillating and mistaken policy of the Government in moving them first from their habitual ranges, and then, shortly afterward, removing them to still stranger regions, before they could become wonted and learn the primary habits of civilized living. The encroachment of the whites, who desired these lands for cattle and sheep ranges, enraged even the docile Indians; and the ration system, corruptly administered, demoralized them. The influx of lawless and predatory whites into Arizona and New

Mexico nullified the best efforts of the few conscientious agents and officers to pacify and civilize the Apaches, who were the wildest and least assimilable of the Southwest tribes.

Major Cremony, who was both an Apache fighter and a student, had no sentimental ideas about what should be done with the Apaches. It did not matter, he said, by what process the Apache had become the most bloodthirsty, villainous, and unmitigated rascal upon earth, it was impossible to make a durable treaty with a tribe each individual of which was a sovereign in his own right. There could be but one policy toward these Indians with any chance of satisfactory result. They must be subdued by force of arms and they must be removed from their country. The cost of subjugating them would be a mere fraction of the cost of carrying on petty guerrilla warfare, which only imbued the Indian with contempt for our power.

Yet with equal frankness and justice Cremony endeavors to state the other side of the struggle:

> Tales of violence and wrong, of outrage and devilish malignity committed by Indians are rife all along our frontiers, but who ever hears the other side? . . .
>
> Who chronicles the inciting causes, the long, unbroken series of injuries perpetrated by the semi-civilized white savages who fled from justice and sought refuge among the copper-colored savages of the woods and plains?
>
> Naturally ferocious, warlike, revengeful, and treacherous as were the aborigines of America, we educated them to a pitch of refinement in cruelty, deceit, and villainy far beyond their normal standard. . . . The inherent disposition of the American nomad inclined him to hospitality; but that inclination has been completely blotted out. . . . Keenly alive to a sense of inferiority of their armament, incapable of subsisting large bodies of men for any considerable period, and perpetually engaged in . . . exterminating each other, the several tribes have been reduced to the necessity of employing deceit

against force, cunning against courage, artifice against honesty.

Cremony thought one of the most serious obstacles to a settlement of the Indian problem was our form of Government control, and that this could not be remedied so long as the Indian Bureau continued to be a political machine. Savages could not be expected to comprehend why new and untried agents should be sent every few years; nor why they should institute a new policy in regulating relations with the Great Father at Washington. It was not to be wondered at that the savage should lose confidence in people who, while claiming to be his superiors, displayed such disregard of decency and good faith. After a lapse of more than fifty years, Cremony's conclusions are still sound: 'Time, patience, zeal, great experience, and conscientious discharge of duty are indispensably required for the proper and just management of our Indian relations, and even then they will be found delicate and difficult.'

CHAPTER XXV

CUSTOMS AND CHARACTER OF THE APACHES

THE typical Apache, as we have seen, was essentially a warrior, the hardiest of men selected by ages of struggle from a wild nomad stock of exceptional abilities. His fighting qualities and his marvelous resourcefulness were the product of centuries of predatory living in a difficult mountain-desert environment. He was the bandit and the outlaw of the earliest times, swooping down upon the sedentary tribes and destroying their hard-won culture; and his sons were the offspring of women who survived solely because they were as hardy as himself. No poor material certainly, out of which to develop a settled, material-minded, competitive people.

Charles F. Lummis, in his brilliant chapter on the 'Warrior Apache,' summarizes his qualities:

> The Apache could wear out in physical endurance the most enduring of his white foes. Hunger he could stand twice as long, and thirst four times as long, as the best of them. . . . No less important to his success than this great endurance was his method of war . . . the policy of invisibility. Throughout the two last campaigns it was a problem not of fighting but of finding him. . . . He needed nothing which the Saxon had to have — from food to leader. He was equal by himself to every emergency of the desert and of battle. With his perfect physique he had a military adaptability absolutely elastic. When our troops started on a campaign of months in the desert, they must take supplies to last . . . the saddle and pack-animals must be kept efficient to the end of the campaign. . . . Here the Apache had superiority. He started astride his best horse and rode it at top speed till it fell. Timely, before this juncture, he had raided some rancho, and gathered fresh stock. . . . Little wonder, then, if with his own

greater endurance, he traveled incredible distances compared with those who could not afford to kill a horse or two a day.

The Apache had and needed no pack-train. His ammunition was stored in numerous belts about his body. His commissary was the unit of simplicity. There were no pots, no frying-pans, no canned goods, no cases of hard-tack and salt horse. When he moved at leisure, he carried a load of jerked meat, roasted mescal, and other desert dainties; but these were discarded in time of need. . . . To him the desert afforded a menu when he had time to stop for it. Prairie-mice, lizards, rattlesnakes . . . all these are seasonable meats. When his hardy bronco at last succumbs . . . the tenderest portions of him are hacked off to dangle in sun-cured strips across the back of his successor. His long intestine is cleaned and becomes a water-keg. . . . It is surprising how the limited flora of the sterile range caters to every want . . . mescal gives the aborigine a quasi-bread, two athletic intoxicants, thread, and even clothing . . . mesquite beans make palatable cakes, the fruit of the Spanish bayonet suggesting dates . . . mountain acorns, deer, turkey. . . .

He took care that, whether advancing, retreating, or holding his ground, no inch of his tawny hide should be exposed. . . . The soldier found him thus entrenched among the rocks, and in reaching him was largely exposed. He could not take advantage of the ground as could his wily foe; and the consequence was that for every Apache killed in war ten or twenty of our soldiers bit the dust.

Every water pocket in the mountains, every petty spring, every hollowed rock wherein the rare rains might leave a life-giving drop — all were his. At every advantageous point he had a stronghold, where labor had supplemented Nature, and where spare arms and provisions might be cached. He never went into camp without fortifying his position. A pursuer might pass within a hundred yards and never suspect. . . . With such a country and such a knowledge of it, it is little wonder that the Apache was elusive.

Because of their wild nomadic habits and their fighting temper, intensified by resentments against white encroachment, much less is known of Apache family

life, social customs, and human qualities than of the Pueblos or the peaceful Pimas. If the Chiricahuas be assumed to be the 'typical' Apaches, it can be said that, before they became infected with white men's diseases, they were finely built, muscular, with broad heads, high cheekbones, and long, abundant hair — the women quite as hardy and vigorous as the men. Within the limits of their own experience they were intelligent, and are described by an early writer as having 'an open countenance, exhibiting uniform good nature, save when in anger.' Perhaps because of their humiliations and entire change of conditions, they are now often sullen and difficult to approach.

Politically, the Apaches were loosely organized, acknowledging no permanent chief. They constituted a 'pure democracy' in that every man was the equal of every other, and chiefs won and held their leadership solely by personal qualities. In peace-times the band traveled on horseback in families — warriors, women, and children; in war the men would unite under a chief, leaving their women at rancherias hidden in the mountains, but not infrequently the women fought fiercely when the band was pursued on the war-path. Although intermarried to some extent with the surrounding tribes and with the Mexicans, they keep even to-day a distinctive appearance and their tribal identity.

From earliest times the women seem to have grown corn and melons at the rancherias, but the tribe subsisted chiefly on wild game and horse meat, refusing to eat fish or wild turkeys because of traditional tabus. Horses — mustangs — not only provided transportation and meat, but served as means of exchange with other tribes for food, hides, or a woman.

Sons-in-jah, an old Apache hanging about a cavalry camp, when questioned as to how his people lived, said:

There is food everywhere if only you know where to find it.' Leading the officer to a spot bare of herbage, he dug up small roots the size of a gooseberry which were as palatable as sweet potatoes; he pointed out the wild sunflower, from the seeds of which a cake-flour was made; and the agave plants whose fleshy leaves and trunk the Indians steamed in pits with hot rocks to make a sweet, nutritious food. Bartlett, in his 'Personal Narrative,' relates how the people of Presidio Del Norte, when their crops failed, lived for six months on this roasted 'mescal.'[1] The old Indian instructed him further: 'We know exactly where, when, and how to trap and catch small animals like the prairie dogs, foxes, raccoons, and others, and there are besides many plants of which you know nothing and would not eat if you did.'

The temporary wickiups of the Western Apaches were oval in form; in summer merely brush shelters; in winter made of poles thrust into the ground, drawn together at the top, interlaced with twigs, and covered with earth or coarse canvas. This is still the characteristic dwelling of the majority, but where lumber can be had, they now build shacks or occasionally a framed house. The Jicarillas, whose wickiups are cold and unsanitary, are being urged to build Navajo hogáns, which are larger, more substantial and livable. The Mescaleros build tepees like those of the Plains Indians.

In the center of the wickiup a firehole was dug and a smoke escape left at the top. Furnishings consisted of skins and blankets, for which they bartered with the Navajos, rawhide saddlebags for small articles and for packing food, gourds for water, mealing-stones, and large carrying and storage baskets. Hardware is now taking the place of Indian utensils, and white flour, beef,

[1] Though called mescal, it should not be confused with the distilled drink of that name, still abundantly made in Mexico.

mutton, and beans have been substituted for horse meat and wild plants and seeds.

The ordinary dress of the Apache is now an ugly combination of cheap factory and Indian-made garments, but it was formerly very picturesque, especially on ceremonial occasions. Men ordinarily went about in loincloth and moccasins. The buckskin moccasins of both men and women were of a peculiar type, with hard rawhide sole and upward-curving toe, often extended with long uppers to protect the legs. Women formerly wore buckskin tunics and short fringed skirts decorated with beads. But even ceremonial dress is much modified.

Apache women now wear long, full calico skirts, which ripple gracefully as they walk. Presumably this Victorian skirt was adopted under the tutelage of Franciscan and Protestant missionaries, and now persists because of the scarcity of buckskin and the traditional modesty of Indian women. To this has been added a square silk or cotton manta of bright color floating from the shoulders.

Both sexes wear necklaces of shell, turquoise, and silver, bracelets of beads, copper wire, or Navajo silver. Formerly the face was tattooed in dark blue geometrical designs on forehead and chin, and painted in brilliant colors and the eyebrows plucked out, giving a ferocious expression. The hair hung loose below the banda and men wore eagle feathers in it on important occasions. As a sign of mourning, it was cut square and left dishevelled.

In hunting or on the war-path, Apache men used the bow and arrow, sometimes poisoned with snake venom; a long spear and a war club made of an oval stone wrapped in rawhide and with a horse-tail handle attached. As for peace-time occupation, the warrior scorned labor, though capable of incredible endurance

and hardship in the field. To the women fell all the work of food preparation, tanning of hides, care of children, making and breaking camp, and bearing of burdens.

The Apaches were perhaps the hardiest of all American Indians, going about all but naked in zero weather, bathing themselves and their babies in icy mountain waters. Cremony declares that the women, 'numerous, well trained, and desperate,' rode like centaurs and handled their rifles with deadly skill. 'No amount of cold, hunger, or thirst,' he says, 'seems to have an appreciable effect upon an Apache. Apaches will undertake a venture which will stagger the courage and nerve of a hundred Pimas or Navajos.'

Racing on foot was one of their chief recreations. On one occasion the officers of an army post offered prizes to racers of both sexes. An Apache girl of seventeen easily won the principal race. As among other tribes, gambling was a constant accompaniment of games of cards and races. The ancient pole and hoop game, stave game, ring and javelin, and quoits, are still played, and Spanish cards are a common amusement among both men and women. Children were taught to play a hide-and-seek game to fit themselves for concealment from the enemy, and became incredibly clever in creeping up on game and in stealing horses.

Women, although always subordinated to their husbands in public, had a definite power in family life and custom. Formerly polygamy prevailed to a limited extent, an old rich man usually taking more than one woman and a widower being expected to marry his wife's younger sisters. When a young girl arrived at marriageable age, the fact was announced and a feast was given at which young men, costumed as buffalo, bear, and other animals, danced about the open fire. Marriages

were initiated by the parents and completed by the purchase of the bride. But, as among the Navajos, the suitor tied a horse before the wickiup of the girl. If she fed and watered it, it signified acceptance, and the couple, after the wedding ceremonies, retired to a bower built by the bridegroom for the honeymoon. Faithless wives were punished by whipping and by cutting off a portion of the nose — even to this day one may see old women with mutilated noses. A man never speaks his own name or the name of a dead person nor addresses or looks at his mother-in-law. When a baby is about to be born, the wife with women relatives retires to some secluded spot and, after bathing the newborn child in the nearest cold water, returns to her daily routine in camp.

Among the Apaches, ceremonials are few and usually the property of the medicine men. The Scalp Dance with the purification of weapons, the marriage and puberty feasts with their appropriate ceremonials, the burial of dead warriors and the Devil Dance are those that have survived to modern days. It is a mistake to suppose that the Apache warrior always scalped his enemies. After a battle, it was customery to select one or two scalps for the performance of the religious ceremony of purification. The warriors bathed themselves and their weapons in a stream and the medicine man performed certain rites with incantations to drive away the menacing spirits of the dead. It was necessary that each warrior should take a few hairs from the enemy's scalp and burn them, to purify the battle-field and make it safe for the Apaches.

The Apache has a mythology like that of his kin the Navajo, but it is less organized and much less poetic. Professor Hartley Alexander says that the same gods appear, frequently with the same names and similar stories in a fragmentary form. Their rites and ceremo-

AN APACHE WOMAN WITH HER BABY
She was educated at Carlisle and speaks good English

AN APACHE GIRL

nies have many common elements, but as a whole the bulk of the Apache lore is 'on a level inferior to the Navajo, with emphasis on the coarser elements and on the unedifying adventures and misadventures of Coyote.'

This is the briefest review of what remains of Apache culture, saved from ages in which they had been the terror of other Southwest tribes and carried over into an era in which every man's hand — Indian and white alike — was against them. In spite of their high warrior qualities and their self-sufficency, almost no one has believed that they could be civilized or that they were worth saving. For three hundred years the sedentary and peaceful tribes have been learning the ruthless determination of white men to civilize or kill off the primitives. It has remained for the miserable, humiliated Apache bands to begin their lessons in civilization in our own time.

CHAPTER XXVI

THE MODERN APACHES

THE scattered and broken bands of the Apaches were gradually settled by force of arms and by treaties: the western bands upon the White Mountain and San Carlos Reservations in Arizona, the Mescaleros and the Jicarillas upon their present lands in central and northern New Mexico. During the whole period of their subjugation by the Government, there had been some bands and many fragments of bands who were willing to settle down and adopt cattle- and sheep-raising and even agriculture to some extent.

Already a new process of selection was going on between the wild warrior types and those more capable of socialization, but less known to history. No just estimate of their progress and their present condition can be made without taking into account their lurid background and the wide variations among individual bands in capacity and temper. Leadership among them lay inevitably with the warrior type even after they had given up the struggle against the whites. And it was this arrogant and self-sufficient class whom the Government undertook to coerce into the forms of modern civilization.

If, then, the traveler of to-day sees the remnants of hostile bands on reservations making slow progress in civilized living, let him with a just mind attribute their sullenness and apathy to many factors — not to the mistaken one of inherent incapacity. The early military men sent against them testify that the Apaches were not stupid, but, on the contrary, very shrewd and logical

in matters within their own knowledge. They were then physically powerful, and their present degeneracy is largely due to white men's diseases and to the sudden change from nomadic to settled and unsanitary habits of living. No small factor in their slow adjustment is a deep sense of humiliation and discouragement. They know that a greedy element among the whites would gladly see them die off; and the more intelligent they are, the less hope they have of recovering their self-respect and a place in this new and utterly alien world.

Since the World War they have regained to some degree the respect of military men, at least; not only because Indians in general gave more than their quota of fighting men, but because the whites were compelled to use Apache methods in Europe. The Apaches have lived to see their methods of guerrilla warfare, successful for so many years against American soldiers, effectively employed as an American contribution in the World War.

It is not too late to save, in the young Apache, those high qualities which made his primitive forbears great warriors, marvelously adapted to their wild conditions. An adequate health service, an education which will fit them for the kind of life they must inevitably live and which will not divorce them from their own people, just and honest treatment by Government officers, and protection from predatory white settlers, may yet save them from extinction.

THE MESCALEROS

The Mescaleros proper, when located in 1883 upon a reservation about twenty miles from Tularosa, New Mexico, numbered about four hundred and fifty, and have increased only slightly in forty years, chiefly owing to the prevalence of tuberculosis and a low standard of

living. In 1913, there was located on the same reservation, at White Tail Canyon, a hundred and eighty-three Chiricahuas, two thirds of Geronimo's followers, who had long before been taken as prisoners of war to Oklahoma.

Although the total area of this reservation amounts to nearly half a million acres, much of it consists of rugged mountains covered with hardwood timber and only a very small portion of it is cultivable. The altitude is high, the growing season short, and only small patches can be cultivated even where irrigation is practicable. The chief source of income is live stock — cattle, sheep, horses, and mules — an industry to which the Indians are well adapted. This is supplemented by freighting, road-building, and wood-cutting; and by the sale of inferior baskets and superior bead and buckskin work made by the women.

A Protestant mission of the Reformed Church of America and a Franciscan mission have been established here for some years. Christian ceremonies are slowly superseding Indian customs, and medicine men have less and less influence with the younger Indians. In 1926, the Commissioner of Indian Affairs reported one hundred and sixty-eight eligible children of school age as enrolled in the local Government boarding-school or at Santa Fé and Albuquerque, but the local school is overcrowded and the number of teachers inadequate. Most of these Indians still live in wickiups, and the youth who are sent away to school are often utterly discouraged by the conditions of squalor and disease to which they must return. A sanatorium has been opened and a field matron is now employed by the Government.

THE JICARILLA APACHES

The Jicarillas, numbering in 1907 about four hundred, after four removals from one location to another, were

finally settled on a tract of 761,000 acres in the northernmost mountain region of New Mexico. C. E. E. Lindquist, in his 'Indian Survey' of 1922, reports:

> The land is generally high, semi-arid, timbered in portions, and makes good grazing range especially for sheep. The season is short, the winters cold and the land generally unfit for agriculture. The character of the soil which is adobe, and climatic conditions, combine to make agriculture unprofitable. Only a small area is irrigated, but there is a little dry farming, wheat and oats being the principal crops. . . . About 300 persons are engaged in the sheep industry and there are some 25,000 head of sheep. Basketry and blanket weaving are the principal native industries, employing a few women.

This band, long ago regarded as the most worthless and untrustworthy of the Apaches, have been also the most miserable of the Southwestern tribes.

> The depression of these unfortunate people [continues Mr. Lindquist] is not surprising. The outstanding fact of their lives is disease, since 70 per cent of them are afflicted with tuberculosis. This scourge has contributed to their poverty, has caused numbers to dwindle. . . . Housing conditions are bad. Some of the Indians live in log cabins and others in tepees, even during the long, cold winters, and this situation, together with lack of nourishing food, has been largely responsible for present health conditions.

Since 1920, the population has remained stationary around six hundred, owing to inbreeding, malnutrition, tubercular and venereal infection, and high infant mortality. According to the report of the Commissioner of Indian Affairs for 1926, only fifty-two healthy children of the one hundred and sixty-five of school age are in school at the mission day school provided by the Reformed Church of America. The Government boarding-school has been turned into a preventive sanatorium school. In recent years, economic and health conditions have slightly improved, and the long list of the aged and

poverty-stricken receiving rations is reduced to eighty persons.

Since 1914, a church, a parsonage, and a mission school have been located here by the American Reformed denomination. But however praiseworthy their social work, increased health service is obviously required.

THE SAN CARLOS INDIANS

The San Carlos Indians were originally a part of the Chiricahua division of the Apache peoples, who, after an agreement by the Government with Cochise in 1872, were settled on a reservation in southeastern Arizona. But shortly afterward they were moved for a time to Fort Apache, and finally in 1875, much against their will, they were transferred to their present location. During the eighties many of them went out with Geronimo on his repeated raids. Somewhat later, several bands of their kindred and others, who had been their age-long enemies, were placed on the same reservation.

By 1909, many had settled down peacefully to agriculture and industry. A scientist traveling through here at this period reports seeing the San Carlos Valley filled with their growing crops. But under the pressure of local cattle companies these fields and pastures were taken from them and their reservation was stocked with the companies' cattle at a dollar a year per head. This fee, the Indians complained, was not paid to them. In later years, however, they have been given some cattle of their own by the Government and are reported to be prospering.

The portion of the reservation under the San Carlos Agency is 1,834,240 acres and its population in 1926 was reported as 2511 persons. Within its boundaries are the

Roosevelt Dam and the lumber town of Rice, Arizona. A new highway passes and several hundred whites live upon the reservation.

The White Mountain reservation, adjoining the San Carlos, has an agency at Fort Apache. The population settled on this area of 1,681,920 acres originally consisted of the Coyotero Band, then known as the Sierra Blanca Apaches, but now includes a half-dozen other groups, numbering altogether 2628 Indians.

Smaller groups of Apaches are scattered elsewhere, mostly in Arizona. About 290 live off the reservation near Roosevelt Dam; 200 Apache-Mojaves — mixed bloods, more accurately called Yavapai — live at Fort McDowell; over 400 — offshoots of the Apache family — are on the Camp Verde Reservation, near Prescott; the remaining third of Geronimo's Prisoner Band are still living at Fort Sill, Oklahoma; and 179 Kiowa-Apaches are under the Kiowa agency in Oklahoma.

The twenty-five hundred Indians under the San Carlos Agency are still very poorly housed. According to Lindquist's report of 1922, nearly two thousand of them live in one-room shacks and wickiups. This, combined with undernourishment, has tended to spread disease. It is estimated that a fourth of them are affected with tuberculosis and three fourths with trachoma. Hospital facilities are very limited, and there are few field matrons to cover this huge territory. Belief in bad spirits — *tsindis* — and dependence upon their medicine men make these Indians unwilling to adopt sanitary measures. The use of tulapai, an intoxicating drink like tizwin made from corn, and the habit of gambling, precipitate quarrels among them. Their chief income consists of grazing receipts. In 1923 they owned about sixty-five hundred cattle and seven thousand horses, and did a very little farming. They labored at road-

building, ditch work, quarrying, and seasonal wood-cutting; and a few were in Government service.

The lands of these Indians will be damaged by inundation of certain areas after the completion of the Coolidge Dam across the canyon of the Gila River, near San Carlos — a dam begun some years ago for the benefit of the starving Pimas on the desert below. The Commissioner of Indian Affairs announced in 1926 that these damages were being estimated, but no statement appears of what is to be done for the reimbursement of the San Carlos tribe. The dam is to be finished in 1930.

On the two reservations — San Carlos and White Mountain — there are seven Government schools, two of which are boarding-schools at Rice and at Fort Apache; and three Lutheran Mission day schools. Of the one thousand children eligible for attendance, five hundred and forty-one are reported as in Government reservation boarding-schools, two hundred in day schools, and about two hundred and thirty in private schools. Owing to better sanitary conditions, the White Mountain Apaches are increasing and improving. The remnant of two hundred Apaches living off the reservation, near Roosevelt, have suffered from influenza and only quite recently have had an agent assigned to them.

PART VII

THE PASTORAL NAVAJOS

Estsán-atlehi built four large stone pueblos at the four corners of the world for all these people to live in, and she divided them into gentes and gave names to each division. But all the gentes of the Navajos did not then exist. After this she went as the sun had directed, to live in the distant west. When she went west she concluded to make some more men and women to increase the tribe. She made four of each sex from corn of different colors as she had done before, but this time she scratched the skin from her breasts to mix with the meal. She sent these eight to the Navajo country, and with them a bear, a puma and a wild-cat to hunt for them and protect them from their enemies. These people were the ancestors of the Navajo gentes. . . .

Before *Estsán-atlehi* departed from her western home she said: 'I will always be a friend to the Navajos, and will send them everything that is for their good.' Every year her promise is fulfilled; for is it not from the west that the snow comes in winter, the warm thawing breezes in the spring, and the soft rains in the summer to nourish the corn in the valleys and the grass on the hills? Therefore it is, that when we are in need we pray to Estsán-atlehi, the Goddess of the Sunset Land.

From *The Navajo's Mythology*, transcribed by W. MATTHEWS.

As they sat there Dsilyi Neyani said:

'Younger Brother, behold the cigini! (holy ones)' but the younger brother could see no one. Then he spoke again:

'Farewell, younger brother! From the holy places the gods come for me. You will never see me again; but when the showers pass and the thunder peals, "There," you will say, "is the voice of my elder brother" and when the harvest comes, of the beautiful birds and grasshoppers, you will say:

'"There is the ordering of my Elder Brother."'

From *The Translation of the Prophet*, by W. MATTHEWS

CHAPTER XXVII

THE HISTORY OF THE NAVAJOS

The Navajos, originally altogether warlike and predatory, are now, of all the tribes in the Southwest, the most prosperous and virile. Unlike the Pueblos, they are steadily increasing in numbers — from less than nine thousand in 1869 to thirty-five thousand at the present time. From their earliest contacts with more highly developed Indian tribes, and with the Spaniards of the sixteenth century and the civilization of the nineteenth century, they appear as a selective race — adapters and often improvers of whatever they saw that appealed to their fancy.

In prehistoric times it is probable that they learned pottery-making from their neighbors; and it is generally believed that they learned fine weaving and the use of the loom from the Hopis. From the Spaniards and the Pueblos they stole horses, sheep, and goats, and in an incredibly short time became a nation of horsemen and sheep-raisers. In more recent times they have become expert workers in turquoise and silver, in imitation of the Mexicans. Indeed, from a lawless tribe living almost wholly by raiding and looting, they have become in sixty years a peaceful and industrious people.

This swift adaptation to new economic and social conditions is due to a variety of circumstances: They have not been uprooted, moved about, as were the Apaches, their near kindred, but have lived in a homogeneous environment for many generations. Their customs have been less invaded by the Government and by religious teachers, for the simple reason that they do not

live in villages and as individuals have been difficult to reach in widely scattered hogáns over an immense area. They have had, moreover, less contact with whites of the degenerate sort, and thus have escaped the spread of the worst infections. Their temporary dwellings, their custom of moving two or more times a year in order to pasture the animals; their abandonment of any hogán in which a person has died — all together have served them as protection against the filth diseases to which more sedentary tribes have been victims.

Certain racial peculiarities have given them, perhaps, a better heredity. Custom compels them to marry outside the clan in which they were born. Among the Pueblos unquestionably inbreeding has sometimes resulted in decline of numbers and quality of the population. Although the Navajos are, in the main, of Athapascan stock, their own and their neighbors' origin stories show them to be a very mixed people. For centuries they have adopted and captured women and children from the Hopis, the Zuñis, the Shoshones, and even from the Lower Desert tribes. And this mixture of blood has given vitality and variety to the tribe. Related to the hardy and warlike Apaches on one side, they are also mixed with the industrious and relatively peaceful farming and village tribes.

There is, consequently, no 'Navajo type.' Some look like broad-faced Apaches, some resemble the Mongols of northern Asia, who may have been their prehistoric ancestors; others have the high nose and mien of the Plains Indians, and still others may be mistaken for the small-featured Hopis. And they are as varied in temperament as in looks. Yet these blood mixtures occurred so long ago that the Navajos have a distinct social unity and culture which distinguishes them from all other Indians. They are dignified rather than stolid, and often

prove to be gay and humorous on acquaintance. They have a certain alertness and practicality of temperament unusual in our conception of Indians, and are capable of quick adjustment to new circumstances.

The reservation, which had been their range for centuries, and on which they have lived since 1869, is for the most part high, semi-arid mesa-land between the San Juan and the Little Colorado Rivers; containing from twenty thousand to twenty-five thousand square miles and reaching from northwestern New Mexico to the Great Colorado and the Grand Canyon, on the west. By far the largest reservation in the United States, it lies mostly in northern Arizona. Besides the waters of the boundary rivers, there is almost no water to be found except in springs. The rainfall at best is seldom more than fourteen inches per year, and even small farming is possible only in canyons and washes, after the torrential storms of midsummer and the melting snows of the higher altitudes have given water.

Though the region is large and picturesquely varied in character — broken by buttes, mountains, deep gorges, and painted rocks — it is essentially a desert country suitable for grazing rather than for agriculture. Timber is scarce — piñons, junipers, and cedars, and pine and oak on the higher levels. Minerals of value are seldom found, and only recently has oil been discovered in paying quantities. The Navajos, owing to this scarcity of valuable natural resources, have been and are almost wholly dependent on sheep- and goat-raising for a livelihood.

The name which the Navajos now bear is supposed to be from the term *Apaches de Navajoa* — Navajoa being a town in Sonora which was once a frontier — and which was given them by the Spaniards in the sixteenth century to distinguish them from the typical Apaches who

are of the same Athapascan stock. According to Dr. Hewett, the word *Navahú* means great or wide fields, perhaps referring to the wide ranges on which they pasture their sheep. But the Navajos call themselves *Dinè* or *Deneh*, that is, 'People,' as many other tribes have done.

According to their own origin legends, they were created about five hundred years ago and wandered about in Arizona and New Mexico in small groups until they were strong enough to attack the neighboring tribes. In the sixteenth century, they seem to have had additions of Tanoan people, and at the time the Spaniards came they were living largely by raiding and looting the settlements of their Pueblo neighbors.

They were no less warlike than their relatives the Apaches, but prided themselves on not murdering women and children and seem not to have tortured their captives. The foreign names of some of their original clans suggest their custom of enslaving and then adopting the people whom they conquered and carried off.

It is believed by archæologists that one of the chief causes of the abandonment of so many settlements, which had been going on long before the Spaniards arrived, was terror of the Navajos and Apaches. No sooner did the Pueblos raise a particularly good crop of corn, or, as at Pecos, accumulate a fine bunch of sheep, than the nomads raided them. Whatever they wanted they took, and in the nineteenth century their name had become a synonym for thief. The Spaniards brought in horses as well as sheep, and these the Navajos stole, and within a century became a nation of horsemen as they are to-day.

During prehistoric times they seem to have had few arts. Their pottery and weapons were poorly made; they did not know how to weave on a loom and they

made only a few ceremonial baskets. Even their basketry may have been learned from the northern tribes. They were, however, skillful tanners of buckskin like the Northerners. But they lived on the country for the most part — on plants, seeds, wild game, and whatever they could steal.

In contrast to the Apaches, it is the distinction of the Navajo that in historic times he has been clever enough to see the advantages of the achievements of Pueblos and Spaniards and has adopted whatever suited his purposes. When he needed transportation, he stole horses and bred them. When he wanted cloth, he stole or captured Pueblo weavers; and his women learned to make the crude loom and to weave wool as well as cotton. He bartered for — or stole — the Mexican silver coins from which he has developed an elaborate and characteristic type of silver work, different from the Mexican. In short the Navajo has adopted and assimilated an economic system quite different from his native one and has become comparatively prosperous on his own initiative.

In 1849, when the United States took over the Southwest territory from the Mexicans, the Navajos found themselves in a wholly new situation. They were hated by the Mexicans and the Pueblos, and, isolated and wandering as they had been, they knew scarcely anything of the alien white people who were to be their rulers. The first military expedition into Navajo country was made in 1846 by Captain Alexander B. Doniphan, of the First Missouri Volunteers. The account of the making of the First Treaty with the Navajos, contained in the official report of Colonel Hughes to the Government, presents a characteristic picture of the Navajo chiefs who came in to represent their people.

Three hundred and fifty American soldiers, after severe marches in November, traveling through rugged

and almost pathless country and camping in the snow, met five hundred Navajos at Bear Spring, near Gallup. There Captain Doniphan explained to the chiefs that the United States had taken military possession of New Mexico and that under our laws the New Mexicans were to be protected from violence and invasion. The United States was also anxious, he said, to make a lasting peace with the Navajos and to give them the same guarantee of protection that was given to the Mexicans. If they refused to treat on terms honorable to both parties, he was instructed to prosecute a war against them.

The young chief, Sarcilla Largo, replied boldly:

> Americans! You have strange cause of war against the Navajos. We have waged war against the New Mexicans for several years. We have plundered their villages and killed many of their people, and made many prisoners. We have just cause for all this.
>
> *You* have lately commenced a war against the same people. You are powerful. You have great guns and many soldiers. You have therefore conquered them, the very thing we have been attempting to do for so many years. You now turn upon us for attempting to do what you have done yourselves. We cannot see why you have cause of quarrel with us for fighting the New Mexicans on the west, while you do the same thing on the east. Look how matters stand! This is *our war*. . . . If you will act justly, you will allow us to settle our own differences.

The logic of this was unanswerable, but Captain Doniphan explained that the whole of New Mexico now belonged to the United States, and that, when the Navajos stole from the New Mexicans, they were now stealing from the United States, and that this could not be endured any longer. The Government intended to open valuable trade there, and from this the Indians would benefit. The chiefs replied that they had no direct cause of quarrel with us and had no wish to have war with so

powerful a nation — they would cease their depredations and would sign the treaty.

The Triple League was signed. But the Navajos and the New Mexicans had been at war for three centuries, and it was scarcely to be expected that the Indians would or could keep such an agreement. The chiefs might promise and sign under the threat of war, but the young warriors of the tribe would inevitably go a-raiding. Their prowess and their tribal pride would demand it. They continued at intervals for fifteen years to attack the settlements, in spite of six successive treaties and three military campaigns sent against them.

Finally, in 1862, it was determined in Washington that this could not be tolerated, and General Carleton made a comprehensive plan for the subjugation of the Navajos. The purpose of this would be 'never to relax the application of force . . . to gather them little by little into a reservation away from the haunts and hiding-places of their country,' and there to instruct them in the arts of peace. He believed that, when the old Indians died off, the young ones would become contented, and that, meanwhile, the Government would feed them cheaper than it could fight them.

To carry out this purpose, Kit Carson, a plainsman and a mountaineer, was chosen. The preparations were thorough and the Navajo chiefs were notified in the spring of 1863 that the Indians who desired peace must come in to (old) Fort Wingate before July 20th — after that every Navajo would be regarded as a hostile and treated accordingly. Some came in, but more did not, and in August the pursuit of the defiant Navajos began. There was little fighting; the plan was to wear out the hostiles by capture of their herds and their horses, by destroying their corn, melons, and beans, and keeping them away from their scanty water-holes. All who came

in and all the captives were to be taken far away to Bosque Redondo (now Fort Sumner), in eastern New Mexico.

A perfect 'hornets' nest' of Navajos broke loose, but in the autumn more and more came in to surrender at the posts as their food supplies were destroyed. The climax of the campaign was reached when Pfeiffer's column, in January, 1864, at the east end of Canyon de Chelly, and Carson's men at the west end, began the bottling-up and clearing-out of those in refuge there. This canyon, thirty miles long, deep, and very crooked, with many side canyons and abundant springs and its high walls honeycombed with cliff dwellings, had been the impregnable fortress of the Navajos. On its floor corn and beans and thousands of peach trees were cultivated and many sheep and goats pastured. And the Indians thought themselves safe there.

Pfeiffer, whose wife had been killed by the Apaches and who hated all Indians, plunged with his men lightly equipped, into the canyon, burning their hogáns, destroying their stock, while the Indians shot and cursed and threw rocks down upon them. The canyon walls, almost perpendicular and from a few hundred to a thousand feet high, 'rose and sank, widened and narrowed.' At the end of the second day, Pfeiffer and his men emerged at the west end, having killed only a few Indians, but leaving them without food or habitations. Pfeiffer's men emerged with ninety women and children prisoners; Carson's troops, who had encountered heavy snow and made little progress, went back and destroyed all the peach trees and crops and brought in as many more as they could capture.

At last the resistance of the Navajos was broken; chiefly, it must be granted, by starvation. In March, Carson reported that three thousand Indians had sur-

rendered, and that the total number of the tribe did not exceed six thousand. But hundreds had fled earlier to the high mountains of the reservation at the northwest, and many of these, unquestionably, never came in. General Carleton estimated the total of the tribe at eight thousand, of whom six thousand ultimately arrived at Bosque Redondo on the Pecos River.

Already there had been concentrated there five hundred Mescalero Apaches, subdued at last, but still savagely resentful. And to the east there still roamed the fierce Comanches. Among their traditional enemies, three hundred miles from home, the Navajos were held as prisoners for four years, under the guardianship of their conquerors. The story of their exile is still told among them by the oldest men, and no historian can relate a more moving account than Hostin Tla, of Red Lake, who was taken there as a child and whose uncle, Go-ma-los, was one of the chiefs chosen to go from Fort Sumner to Washington to talk with President Grant and to beg that they might return to their own country. A portion of his naïve and circumstantial story is given here:[1]

THE GOING TO HUAL-TE

When the people came in and surrendered the soldiers took their guns, bows and arrows and lances away from them and marched them to Hual-te [the Navajo name for Fort Sumner]. There they gave them back their weapons and the Navajos built their hogáns scattered about.

Others who were not taken prisoners followed after them, having heard of the rations and of the kind treatment received and they were there four years in all.

When the Navajos first came in, the soldiers gave them flour, bacon, and coffee, but they did not know what to do with it. Some ate all the flour straight, others mixed it with

[1] Told, and interpreted to Dane Coolidge in July, 1925, by Hostin Tla (whose Indian name means Left-Handed) at Red Lake, Arizona.

water and ate the dough; they kept the bacon too long, and it became strong and made them sick. They tried to cook the coffee berries like beans without roasting or grinding and they would put a pound of rice in a kettle all at once. The result was that many died on the road to Hual-te; and the first year they were there they had epidemics of smallpox, chickenpox, whooping cough, and pneumonia, and many died.

Hual-te was in a flat country with low hills like those around Red Lake, and there was no wood there except along the river, cottonwoods, but a guard was placed there to keep them from cutting them, as they held the banks of the streams. As soon as they got to Hual-te, they were issued enough clothes to make a shirt and summer pants or drawers, and each was given a pair of scissors, needles, thread, and a pick, shovel, axe, and mattock, but they did not know what they were or what the tools were for. So they traded the whole handful of stuff that had been given them to Mexican sheepherders for sheepskin and made clothes out of that. They took the axes and shovels and dug out the stumps of mesquite trees that grew on the hills, using roots, etc., for wood. It was five miles to the hills to the first wood and after cutting it up they made packs and carried it in on their shoulders. But they were very cold that winter, hence the pneumonia.

On the same reservation, or near it, were two very mean tribes of Indians, the Mescaleros and the Comanches, who threatened to kill all the Navajos; so the second year the Navajos moved in and built their hogáns side by side near together along the edge of the river-bottom in order to protect themselves, as the Mescaleros and Comanches would kill them when separated.

In the spring of the fourth year, Big Neck called the Head Men of the Navajos together and told them there were two big Bosses of the Americans, one at Santa Fé and the Big Boss at Washington. He asked them to send delegates to Santa Fé to see the Boss there, and he requested them in turn to pick men from the different clans who would talk best for them and represent their people, to go back and see Washington.

One of these was Go-ma-los [Tla's uncle], and he told him about the trip.

They rode east for several days and they were put into a Moving House [railway car], which took them east so long they lost count of the days. They finally stopped in a big city and went to a very tall building [the Capitol]. It reached clear up into the sky and they were afraid to go in the front way. So they went to the first floor and their interpreter, who was a Mexican and spoke poor English, told a man there that they wanted to see Washington. He sent them up to the second floor, and so on until they reached the top, where they saw the Big Man [Washington] President Grant.

He asked them what they wanted, and they told him they wanted to go back to their own country where there was lots of wood to burn. It was then for the first time they learned that they were prisoners. They had been fed so well and treated so kindly at Hual-te, and allowed to keep their arms, that they did not realize that they were captives, as Indians are not kind to prisoners.

The President said he was going to give them some good advice. They had robbed and fought with all their neighbors and killed the Mexicans and Americans, and it was for that they had been taken to Fort Sumner. But there they had kept on fighting and stealing, and if they ever wanted to go home they would have to quit their mean ways and be good.

They said that was what they wanted — his advice, how they could get back home, and if he would let them go home they wouldn't steal or fight any more. Washington said they thought a great deal of the Navajos, otherwise they wouldn't have spent so much money to feed them and clothe them. Now, if they would be good he was going to make them just like himself; they would wear shoes like his shoes, pants like his pants, a coat like his coat, and a hat like his hat. A big school would be built on their reservation and he wanted them to make a treaty to send all their children to it to be educated like the white men. But if they ever stole or killed people again, they would be taken to a far country and would never come home.

The Navajo chiefs returned to Hual-te and told their people that they were to be taken home next spring; but two months later, Big Neck told them two generals were coming to move them home and for them all to come to Sumner. They all

came in and one morning all the big cannons began to shoot and soldiers told them the generals were coming.

They came and made a treaty with the Navajos and then told them to get ready. The next day the Navajos started for the river below Albuquerque. It was summer and there was no water on the way; but just when they were going to die of thirst they would come to some spring or water-hole or it would rain. So they all came to the Rio Grande alive in four or five days. The river was high and they waited nine days at the ferry before they crossed. They returned by way of Jemez (by a hot boiling spring) to Fort Wingate, where an army officer gave them about the same advice they had received from Washington. He told them they would be given a reservation and asked how big their country was, but nobody knew, as no one had ever been all over it. He said it would be marked off for them and they must decide where they wanted the school. They said at Fort Defiance, as it was in the middle of the Treaty Reservation. He said there was clothes and food, etc., at Fort Defiance for them, and when they arrived there they found beef cattle and flour.

When the Navajos were turned loose at Fort Defiance, the soldiers took away their guns and weapons, even their war caps and war leggings, used to protect them. This was to keep the old men from bragging about what great warriors they were and thus inducing the young men to go on the war-path. The caps and leather shields would make them see wrong (crooked) and make their tongues talk crooked.

The first year, on their return, two sheep were given to every Navajo, little children and all, and the officer made them a talk. He told them to take good care of these sheep and they would increase and the Navajos would increase; but if they killed them and wasted them, their supplies would decrease and the Navajos would decrease. The different clans put all their sheep in one herd and took good care of them; and the next year the Government gave them one more apiece. The Government also issued rations of flour and beef and gave them some good rams instead of the scrubs they had. As the herds increased, the Navajos moved farther and farther west for pasture, until they spread out all over the reservation, but, when they left Fort Defiance, the rations ceased.

From the beginning, the policy of concentration at Bosque Redondo, as elsewhere, had been a failure. In order to persuade the Navajos to come in, promises of fat living in a beautiful country had been given. The food when they first arrived at Fort Sumner was abundant, but later, very meager. Irrigation ditches were built and land was planted to grain and produce — but the army-worm and the cut-worm ate it up for two seasons; and drouth and hail and frost added to the miseries of the exiles. Blankets and clothing and tools promised by the Government did not come, and wood was so scarce that the Indians froze and sickened in winter. The women complained bitterly because they had no sheep to tend and no wool with which to spin and weave, while idleness, homesickness, and contagious diseases tormented them.

After the return from exile in 1869, the Navajos remained a chastened and, as compared with the Apaches, a law-abiding and industrious people. Some injustice or some misunderstanding with officials has, at long intervals since then, set them in opposition to the Government. But they were too intelligent not to remember Hual-te and its lessons, and the old chiefs, who had lived through that exile and had been to Washington, told the young hot-heads of the immensity and power they had seen. And the struggle to reëstablish themselves on their old ranges with their few sheep, goats and horses wholly occupied their energies. Stripped of everything, they began all over again, and the modern Navajo is the inheritor of what was most deeply ingrained of native custom while he perforce took up such of the white man's customs as he could not escape or as he might shrewdly perceive to be to his own advantage.

CHAPTER XXVIII

NAVAJO CUSTOM AND CEREMONY

The Navajos have held fast to the essentials of their primitive life in spite of all efforts to change them. Their comparative isolation and semi-nomadic habits on the vast ranges of a particularly rugged and arid country have left them more free from alien contacts and coercions than the sedentary Indians. The circular hogán — of tall brush in summer and of logs or mud-wattled brush in winter — is still the characteristic dwelling. The general superstition that evil spirits — *tsindi* — will take possession of the dwelling, as soon as life departs, causes the relatives to abandon any hogán in which death occurs. The mortally ill, if possible, are carried out of the house to die.

Since the herds must move on often to find pasture, the temporary brush house is the practicable shelter. Even if settled in the district assigned to them by the chiefs, no Navajo clan would build a permanent village. But in recent years the more progressive have sometimes built stone or adobe dwellings, like the Mexicans, or occasionally houses of wood in which they live as they have been taught to do in the schools.

Besides the domestic hogán there is the small sweat-house for curing diseases, which has no smoke-hole and is heated with hot rocks; and the larger medicine hogán built for the sand painting and the curing ceremonies at the direction of the medicine men.

Navajo dress, though altered in modern times in style and materials, remains distinctive. Men wear a peculiar type of trousers of plaid calico, open on the outside seam

NAVAJO SUMMER CAMP

NAVAJO WOMAN IN SUMMER CAMP WITH FAMILY, SHEEP AND GOATS

at the bottom and bound at the waist with a hand-woven sash of green and red wool. Tunics are of calico, or, if they can be afforded, of velveteen or velours in rich dark colors. Men's hair was formerly tied behind, low on the neck, in a double bowknot with bright yarn. But the young Navajo boys who have been to school have their hair cut straight around at the level of the ear and tied with a gay handkerchief bandeau.

Women wear the loose blouse or shirt waist of calico, the long, full calico skirt common among the Pueblos, and a velvet tunic on gala occasions. The typical squaw-dress, made of two rectangular blankets, is worn only on ceremonial occasions. The hair is tied low at the back of the neck in a club knot. A woven belt of green and red colors, homemade footless socks and red-dyed buckskin half-boots with silver buttons on the outside seam, complete the outer costume. Little girls and boys when not in school wear precisely the same type of clothes as their elders. And every rider carries, besides the saddle-blanket, a larger blanket tied to the saddle-strings which may serve as coat or sleeping-blanket. The Navajo woman appears shapeless, for modesty forbids her to outline the figure or expose her person; but, though burdened with these heavy garments, she, nevertheless, rides and moves with the flock and performs labors that would tire most men. Men and women and even children wear a profusion of silver, turquoise, and shell jewelry and ornaments, by which the social standing of the wearer to some extent may be judged.

The tending of large flocks of sheep and goats, the shearing, washing, and preparation of wool, the making of blankets, and the cooking of two meals a day occupy all the time of women and children. The men, less industrious, bring in wood when, as so often happens, fuel is scarce and distant. A very few men become silver-

smiths. Those of a serious and intellectual turn become priests or medicine men — that is, herb and ceremony doctors, leaders of ceremonies, for which a severe training is required. As among the Pueblos, a vast amount of energy is expended by men in preparations for 'sings' and the ceremonies for healing. But most of the men are busy grooming, riding, trading, and herding their horses. The man's importance is reckoned by the number of his horses. The wives own the sheep, the wool, the blankets, and the children. As a consequence the reservation is overrun with many more scrub mustangs than they need or can use, even though every man, woman, and child from babyhood, rides a pony, and in so vast a country needs more than one mount.

The Navajos are altogether democratic. The clan, tracing its lineage to a common ancestor, is the social unit, and each has its chief, who is adviser and adjuster in local affairs. Some clans are regarded as of 'better blood' than others and have a correspondingly greater influence. In recent times there has been developed a council of twelve or more superior chiefs, chosen by common consent rather than by election, for their capacity to deal wisely with larger affairs and especially with the agents and officials of the United States Government. There is no supreme chief and all stand on an equality. The powers of the council appear to be temporary and vague, but are not therefore negligible. The leadership of a chief depends more upon his powers of oratory and his personal influence than upon authority, and for that reason he is often subtly and surprisingly powerful with the tribe at large.

From the eighteenth century the Spanish Fathers have made attempts to Christianize the Navajos, and in recent years a conscientious effort has been made by the Protestant missionaries to reach them. But only a few

hundred converts are reported from the mission stations which have been established at strategic settlements. It would seem that the only way to touch effectively the scattered, semi-nomadic Navajos is to visit the hogáns and, when opportunity offers, bring in the sick to a hospital or clinic. Friendly contacts and health service may win their minds to the white man's religion.

It was once thought that the Navajos were altogether irreligious, but the observations of Dr. Washington Matthews, from 1890 onward during a long residence on the reservation, revealed a wealth of tradition, mythology, and religious ceremonies, quite as interesting as those of the Pueblos. Professor Hartley Burr Alexander, in his chapter on 'The Navajo and Their Gods,' [1] says:

> It is perhaps in the unmerchantable wares of the mind, in myth and poetry, and their curiously ephemeral sand painting that their powers are revealed at their best. Their religious rituals are characterized by elaborate masques, far more in the nature of drama than of dance; by cycles of unusually poetic song (though their melodic gift is not comparable with that of some other tribes) and by an elaboration and concatenation of myth which truly deserves the name of a mythology, for it is no mere aggregation of unconnected legends, but an organized body of teaching. . . . Very many of the tales found elsewhere in North America as disjointed episodes have been incorporated by them into dramatic series. . . . In mythology as in their arts, the Navajo have been wide borrowers, though in both art and mythology they have bettered these borrowings in relation and design.
>
> Another evidence of advancement in Navajo culture is the degree of anthropomorphic personification attained in their pantheon. . . . All this represents that consistent intellectualization of nature-myth, which finds one of its earliest expressions in the replacing of immanent nature-powers by manlike gods who make of nature their tool. In their curiously geometrical representations of the gods, it is not animals, nor part animals, that the Navajo draw, but conventionalized

[1] *Mythology of All Races*, vol. x.

men and women, and in their ceremonial masques the divine beings still have recognizably human form and feature.

In their religious beliefs the Navajos share the myths and gods of all the Athapascan peoples. The Sun, the highest of the Nature Powers, is not the Creator, and his power is not omnipotent. Many gods are depicted in the sand paintings, and in the ceremonies men must be masked to represent them. It is from the acts of the Divine Ones in the stories, says Dr. Matthews, that we learn 'their thoughts and feelings — kind, like Indians, to their kindred; usually cruel, yet often merciful and magnanimous to their foes.' The poetic side of the divine character is expressed in the long prayers which are the means of obtaining favor.

The wife of the Sun, Estsán-atlehi, variously named the 'Turquoise Woman' and the 'Woman-Who-Rejuvenates-Herself,' is most highly revered and is probably the personification of fertility or of the changing year. She is associated with the earth and lives in the west, from which direction the rain winds come. Her personality is sometimes merged with that of her sister, Yolkai-Estsán, the 'White Shell Woman,' who is associated with the waters. Their sons, the Hero Brothers, as in many other race myths, have a mission to slay monsters and alien gods, to help warriors in distress, and the sick who are victims of witchcraft.

Besides these major personages, there are many minor powers or genii, called Yei, who help mankind. They are supposed to dwell in far places, in the mountains and the ruins of the Canyon de Chelly. The House God, the Talking God, the Water Sprinkler; fire gods, corn spirits, and harvest deities are among the Yei. The Ana-yei, monsters and bogies; and the tsindi (chindee), devils, are the malevolent spirits. From the time of First Man and First Woman, every human being and every animal

has been immortal and their shades are worthy of reverence.

The ceremonies of the Navajos, growing out of their mythology and beliefs, are similar to the Pueblo rites in being of nine days' duration, but quite unlike them in many other particulars. There is no fixed time when they must be performed, though it is generally in winter when the snakes are dormant. All the major ceremonies are for the healing of the sick rather than for bringing rain. The relatives and the neighbors of the patient attend and may share in the blessings invoked, but the ceremony is essentially individual, not communal. The sick person and his family engage the shaman and pay the expenses, often amounting to several hundred dollars. Incidentally, the occasion may be used as opportunity for other invocations and for social enjoyment.

There are, it is true, many minor ceremonies for planting, harvesting, building, war, adolescence, and weddings; and in an unusually dry season, a number of Navajos may subscribe to a fund for a priest to sing, pray, and conduct a ceremony for bringing rain.

It is imperative that the priest shall make no errors in the traditional rite, which depends solely on his memory. It must be accompanied by certain sacrifices of cigarettes, feathers, and beads; by elaborate sand paintings which require the labor of several men supervised by the shaman and which must be made and obliterated in one day. The men who wear masks and personate the gods must not speak, but each god has its own peculiar cry.

Among the Navajos dancing is a very small part of any such ceremony. In the nine-day observance of the Night Chant, dancing occurs only on the last night and is interspersed with legerdemain and dramatic performances. The chanted prayers, all more or less alike in form and content, are addressed to some god, who is

told that sacrifices have been made and who is asked to remove the disease and to bestow blessings on the patient and his kindred. The long prayer is given out line by line, and repeated after the priest by the patient. Other prayers are monologues, and there are many phrases like amens, or benedictions, repeated four times each.

The white person who has no understanding of the background of such a healing ceremony, or who dismisses it as wholly pagan and superstitious, is likely to conclude that the officiating shaman is a faker. Dr. Matthews, who was himself a scientist, and who had a more intimate knowledge of the Navajo mind than any observer of his day, says on this point:

> There are, among the Navajo, charlatans and cheats who treat disease; men who pretend to suck disease out of the patient and then draw from their own mouths pebbles, pieces of charcoal, or bodies of insects, claiming that these are the disease which they have extracted.
>
> But the priests of the great rites are not to be classed with such. All of these with whom the writer is acquainted are above such trickery. They perform their ceremonies in the firm conviction that they are invoking divine aid, and their calling lends dignity to their character. They interfere little with the political affairs of the tribe.

Dr. Matthews describes the 'Happy Chanter' of the Night Chant whom he employed:

> He would be considered a man of high character in any community. He is dignified, courteous, kind, honest, truthful and self-respecting. But his dignity is not of the pompous kind. He has a keen sense of humor, makes an excellent joke, and is a good mimic; but for all his fun he is neither vulgar nor unkind. He never begged from the author, and never made a bargain with him in advance for his services, or named a price for them when he was done.

The accompanying pictures are of medicine men whom Dane Coolidge engaged to recount Navajo my-

thology and explain their customs, and who are superior men of the tribe, of high character and entitled to respect. Their chants and sand paintings may be accredited as authentic reproductions of great traditional ceremonies. In the minds of such men are held the lore and moral wisdom of the tribe. It is only from the chiefs and the medicine men that any alien can hope to obtain accurate knowledge of tribal beliefs and standards.

Besides improvised songs, says Matthews, the Navajos have thousands of significant songs, or poetic chants, which have been composed with care and handed down for centuries, perhaps, as a precious heritage. They have songs of traveling, appropriate to every stage of the journey; farming songs, building songs, songs for hunting, for war, for gambling; in short, 'for every important occasion in life, from birth to death. . . . And these are composed according to established, often rigid, rules, and abound in poetic figures of speech.' The most interesting and significant are connected with the rites for healing and demand a high order of training and an exact memory for a nine-day performance.

The lack of space forbids more than a brief mention of the most striking. The Night Chant, the most frequently given among the nine-day performances, is based on an elaborate myth which recounts the adventures of a prophet who visited the sacred places, where he was taught by the Divine Ones the mystery which he brought back to his people. Professor Alexander gives the order of procedure during the nine days:

> On the first day holy articles and the sacred lodge are prepared; on the second, the sweat-house and the first sand-painting are made; and the song of the approach of the gods is sung; prayers and a second sweat-house are features of the third day, while the fourth is devoted to preparations for the vigil which occupies the fourth night, at which the sacred

masks of the gods are sprinkled with pollen and water and a communal supper is followed by a banquet; the principal feature of each of the next four days is the preparation of an elaborate sand-painting of the gods, each picture symbolizing a mythic revelation, and the touching of parts of the bodies of the sick with colored sands from the analogous parts of the divine images; the ninth day is devoted to preparations for the great ceremony which marks the ninth night, at which the masque of the gods is presented.

This masque of the ninth night, from which the Night Chant takes its name, is declared by Alexander to be 'the most poetic description of the genius of thunder-cloud and rain in Indian literature,' and, somewhat abridged by the omission of repetitions, is here given:

PRAYER TO THE THUNDERBIRD (NAVAJO)

The Navajos, of all the southwestern tribes, have the most elaborate poems to accompany their traditional ceremonies. Dr. Washington Matthews in his *Indian Legends* gives the Indian words with a literal translation and a freer rendering as well, of the Prayer to The Thunderbird. This is chanted by the First Dancers on the ninth day of the ceremony known as The Night Chant.

The poem consists of one hundred lines with many repetitions, a single word or phrase being substituted in each succeeding line of the refrain. In order to show the remarkable structure of this poem, the repeated refrain is printed in italics and is to be substituted in each line below until another occurs. The first fourteen lines are given in full.

In Tsegihi (oh, you who dwell),
In the house made of the dawn,
In the house made of the evening twilight,
In the house made of the dark cloud,
In the house made of the he-rain,
In the house made of the dark mist,
In the house made of the she-rain,
In the house made of pollen,
In the house made of grasshoppers,
Where the dark mist curtains the doorway,

The path to which is on the rainbow,
Where the zig-zag lightning stands high on top,
Where the he-rain stands high on top,
Oh, male divinity!

With your moccasins *of dark cloud, come to us.*
leggings
shirt
headdress
mind
With the dark thunder above you, come to us soaring.
With the shapen cloud at your feet, come to us soaring.
With the far darkness made of the dark cloud *over your head, come to us soaring*
of the he-rain
of the dark mist
of the she-rain
with the zig-zag lightning flung out on high
with the rainbow hanging high
With the near darkness made of dark cloud, of the he-rain, of the dark mist, and of the she-rain, come to us.
With the darkness on the earth, come to us.
With these I wish the foam floating on the flowing water over the roots of great corn.
I have made a sacrifice
I have prepared smoke for you.

My feet *restore for me.*
My limbs
My body
My voice
Today, take out your spell for me.
Today, take away your spell for me.
Away from me you have taken it.

Happily my interior becomes cool.
my eyes regain their power.
my head becomes cool.
my limbs regain their power
I hear again

for me (the spell) is taken off
I walk.

Impervious to pain, *I walk.*
Feeling light within,
With lively feelings,
Happily abundant dark clouds, *I desire.*
dark mists,
passing showers,
an abundance of vegetation,
an abundance of pollen,
abundant dew
Happily may fair white corn, *to the ends of the earth, come with you*
yellow corn,
blue corn,
corn of all kinds,
plants of all kinds,
good of all kinds,
jewels of all kinds,
With these before you, *happily may they come with you*
behind you,
below you,
above you,
all around you,
Thus happily you accomplish your tasks.
Happily the old men *will regard you*
the old women
the young men
the young women
the boys
the girls
the children
the chiefs
Happily as they scatter in different directions they will regard you.
Happily, as they approach their homes, they will regard you.
Happily may their roads home be on the trail of pollen (peace).
Happily may they all get back.

In beauty (happily) *I walk*
With beauty before me,
behind me,

below me,
above me,
all around me,
It is finished (again) *in beauty,*
It is finished in beauty,
It is finished in beauty,
It is finished in beauty.

The Mountain Chant is no less interesting and significant. The masque which completes it on the ninth night is interspersed with feats of legerdemain; such as, the burning and restoring of the balls of down on the ends of wands in the wand-dance; the swallowing and withdrawing of plumed arrows, which are afterward used to touch with healing the person of the patient; the planting of yucca, which by magic is made to grow, bloom, and fruit before the eyes of the spectators.

According to Matthews the eleventh episode of the night was the most picturesque and startling of all.

A huge round corral of evergreen branches is built just after sunset on the last day and from eight o'clock till dawn these feats are performed in the presence of hundreds of spectators. The performers march round and very close to the great central fire, which emits intense heat. The skin would probably be scorched if it were not heavily daubed with white earth.

Every man except the leader bore a long, thick bundle of shredded cedar bark in each hand and one had two extra bundles on his shoulders. . . . The leader carried four small fagots of the same material. Four times they all danced around the fire, waving their bundles of bark toward it. They halted in the east; the leader advanced toward the central fire, lighted one of his fagots, and trumpeting loudly [like a sand-hill crane] threw it to the east over the fence of the corral. He performed a similar act at the south, at the west . . . but before the northern brand was thrown he lighted with it the bark bundles of his comrades. . . . When all were lighted the whole band began a race around the fire. At first they kept close together and spat upon one another some substance of

supposed medicinal virtue. Soon they scattered and ran apparently without concert, the rapid racing causing the brands to throw out long brilliant streamers of flame over the hands and arms of the dancers. They then proceeded to apply the brands to their own nude bodies and to the bodies of their comrades in front of them, no man ever once turning round; at times the dancer struck his victim vigorous blows with his flaming wand; again he seized the flame as if it were a sponge, and keeping close to the one pursued, rubbed the back of the latter for several moments as if he were bathing him. In the meantime the sufferer would perhaps catch up with some one in front of him and in turn bathe him in flame. At times when a dancer found no one in front of him he proceeded to sponge his own back . . . until he caught up with some one else.

At each application of the blaze the loud trumpeting was heard, and it often seemed as if a great flock of cranes was winging its way overhead southward through the darkness. If a brand became extinguished it was lighted again at the central fire; but when it was so far consumed as not to be conveniently held in the hand, the dancer dropped it and rushed, trumpeting, out of the corral. Thus, one by one, they all departed.

The hardy Navajo, after sixty years of pastoral living and relative freedom to work out his own fate, and with very little help from the Government, has quadrupled his numbers and more than quadrupled his wealth. It must, therefore, be assumed that his hereditary qualities are superior and his powers of social adaptation greater than those of many Southwestern tribes. But it may also be inferred that isolation, outdoor living, and freedom from interference have had no small part in his progress. For the most part he has been at liberty to choose from white men's ways those which suit him best, and his choices have often been astute.

Two sources of trouble with the Government have arisen and still remain. Their primitive sense of justice cannot endure that the young Navajos who break white men's laws should be seized and taken away to some far

town, tried by white men in alien courts, and punished in white men's jails. And the bitterest grievance of the tribe has been the gathering up of children by Government agents without the parents' consent, to be sent to schools far away; from which they have returned, if at all, wholly foreignized and out of sympathy with their clansmen. In recent years the encroachments of oil prospectors and the appropriation of the tribal funds, against the will of the Navajos, to build roads across the reservation, chiefly for the benefit of tourists, have been serious causes of irritation.

In spite of these and other inevitable disagreements with their conquerors and rulers, they have surprisingly little resentment toward white people in general, and easily discriminate between those who mean well toward them and those who would coerce and exploit them. The chiefs, in dealing with traders, agents, and companies holding concessions, are learning how to protect their tribesmen. Meanwhile, as their numbers increase and many of the younger Navajos spread out beyond the confines of the reservation, living and working among white people on terms of equality and being measured and measuring themselves by white men's standards, a new process of assimilation is set up.

The Navajos in the far canyons and mountains are almost as primitive as in the eighteenth century, but between them and the schooled members of the tribe are thousands on the road to what we call civilization, who are constantly making new adjustments and arriving at a better position both in the tribe and in the communities where they settle. As intelligent white men come to understand their ceremonies and customs, reciprocal respect and sympathy are engendered which may gradually obliterate the cruder aspects of racial difference and bring about mutual toleration.

CHAPTER XXIX

THE NAVAJO BLANKET AND ITS WEAVER

THE primitive art of weaving is many centuries old, perhaps as old as the dispersion of the Indian tribes throughout America. The Navajo origin legend describes how 'the women wore a garment consisting of two webs of woven cedar bark, one hanging in front and one behind. All wore sandals of yucca fibre or cedar bark — their blankets were made of cedar bark or yucca fibre or of skins sewed together.'

In many cliff dwellings and prehistoric ruins woven sandals and bits of cotton cloth of good texture have been found. And when the Spanish explorers came, they found the Pueblos growing cotton and wearing cotton garments which seem to have resembled modern coarse white sacking — tightly woven, heavy, and not so smooth as the factory product. Casteñeda mentions that during the first winter the Spanish Expedition requisitioned three hundred cotton blankets for the use of the soldiers.

When the Expedition withdrew in 1542, a number of sheep were left at Pecos Pueblo with Fray Luis de Escalera, and sheep in considerable numbers were afterward brought in by Oñate when he colonized the country. From this time on, wool began to replace cotton in the garments of the Southwest Indians.

When and how the Navajos learned to weave cannot be certainly known. It may be that they learned coarse weaving very early, from the prehistoric Indians, as the Hopis must have done. Since the Hopis were already fine weavers in the sixteenth century, it is generally be-

lieved that the Navajos learned from them to weave on the ancient Athapascan loom. In their raids on the settlements they had carried off Hopi men, women, and children as well as much loot. From their later history we know that they are an exceptionally inventive and adaptable people; and it would therefore be natural for them to take up loom weaving from their more highly skilled neighbors.

But there is no evidence that the Navajos wove on any considerable scale until they acquired sheep. For such a nomadic and predatory people it was easier to steal mutton than to hunt antelope, deer, and small game; and they carried off many sheep, as well as captives, in their raids. Indeed, there is a tradition, quoted by Spiegelberg, that the Hopis and Zuñis agreed to teach the Navajos weaving, and to exchange their cotton blankets and their livestock for a guarantee of freedom from molestation.

However and whenever the Navajos became weavers, it is evident that any discussion of the development of the modern industry among them should begin with some account of old Hopi blankets. Few specimens remain whose continuous history is known and that can be certainly identified as genuine. It is so much to the interest of owners of rare blankets whose antecedents are unknown to attribute a very fine one to the Hopis rather than the Navajos, that the collector must be very cautious. The information here set down is from some experience in handling blankets and from scientists, collectors, and buyers whose statements are necessarily conservative.

It must be remembered that a superior old blanket of any sort is not inevitably faded and worn — some of the oldest are very fresh-looking and are now to be obtained from the chests of old Mexican families who have in-

herited them, perhaps, and who have not needed to wear them out by usage. One collector, whose items are among the best in the Southwest, identifies old Hopis chiefly by their design of narrow stripes of blue and black; and by their fine, firm, silken weave. One of the finest bears a strip of brilliant diamond design through the middle with narrow blue and black stripes and an occasional white line as a background. Another rare Hopi is extremely silky to the touch, being made from the downy wool under the throat and belly of lambs.

Although old Hopis are comparatively rare, they are not therefore older or more desirable than the Navajos. A few Hopi men have been weaving blankets down to the present time, of native design for the home trade. The dark blankets with narrow blue and brown stripes, sometimes with bayeta and white figures introduced, are distinctively Hopi and were never made by the Navajos. But occasionally the Navajos seem to have made blankets of Hopi style for the Hopi trade.

Other pueblos besides the Hopi continue to weave cotton for ceremonial shirts and wide sashes and to embroider them artistically with rain symbols in bright-colored wools. Until quite recent times the Ácomas wove rectangular squaw-dresses, similar to those of the Hopis, but few specimens are now to be seen. Natalie Curtis thus described a Hopi ceremonial garment: 'This is of white cotton embroidered with a wide black border which is crossed by diagonal stripes of dull yellow — a dye made from goldenrod. Delicate white pencilings are traced through the black, and little gem-notes of color, red and yellow, are set in the center of the design.'

In the beginning the Navajos probably had only a crude loom, such as other Athapascan peoples of the Northwest used for making rabbit-skin or twisted blankets. It is not unreasonable to suppose that, just as

NAVAJO WOMAN WEAVING AT HER OUTDOOR LOOM

YEIBITSHAI BLANKET WOVEN FOR HENRY CHEE-DODGE

the raiders stole sheep, they may also have taken the better loom — with Pueblo captives to instruct them in its operation. However this may be, the Navajos improved the aboriginal loom until it became remarkably effective.

Roughly described, the Navajo loom still in use consists of two smooth poles lashed across two upright poles or trees; around these horizontal poles the warp is wound, the lower pole being weighted with rocks to draw the warp-strings taut. The principal tool used in weaving is the batten, a thin, flat piece of hard wood with blunt edge, about eighteen inches long and two inches wide. Placed edgewise between the warp-strings, it serves to hold them apart while the weaver runs yarn between them. Then, turning the batten, she beats the yarn into place. The tightness of the weave depends entirely on the energy with which the batten is used.

As will be seen, the essential components of this primitive loom are the same as the household loom and the step which it represents, from the primitive to an invented machine, is a considerable one in evolution.

From the time of the introduction of Spanish sheep, the weaver had only three natural colors to use: a rusty black, white, and a brownish gray, and the mixtures which might be made from them; and her inventiveness was stimulated to use the herbs and desert brush with which she was familiar to produce livelier shades. To intensify the native black, she made a dye of sumac, ochre, and piñon boiled together. Similarly she invented a dark blue, several kinds of yellow, and a reddish color which on buckskin is brilliant, but on wool is less attractive. The dark blue was soon superseded by the use of Mexican indigo.[1]

[1] See Matthews, G. W. James, Spiegelberg, Chapman, Hollister, for details of dyes and spinning.

Among the Pueblos in the eighteenth century, cotton and wool weaving became secondary to the making of baskets and decorated pottery, while the Navajos, on the other hand, almost ceased to make baskets and pottery and concentrated upon the making of wool blankets, for barter with their neighbors and sale to the outpost traders.

The processes of preparing the wool are tedious and intricate, requiring great nicety and skill for good results. In early times the shearing was done with flint knives and by pulling the wool from the hide, but now the shearers use steel knives and modern clippers. The fleece is shaken, beaten, and picked over to remove coarse dirt and burrs, and is then washed in clean water made soapy by the crushed amole root (soapweed), a yucca. The more thoroughly the washing is done, the clearer the natural colors will be, the less the odor of sheep, and the better the dye will take. Carding, formerly done by using the wild teasel, is now performed by wire-toothed cards such as our grandmothers used.

The Navajos have never adopted the spinning-wheel and still use the primitive distaff: a slender round stick about two feet long, pointed at both ends, thrust through the center of a round wooden disk. The wool is respun once, twice, or even four or five times, to make it hard and even. For first-class blankets both warp and woof are of wool, spun fine and very tight, so that the texture of the weave shall be firm and smooth. Whatever the pattern undertaken, the blanket will generally be alike on both sides — that is, single-ply — although the most skillful weavers are able to weave in several more intricate styles.

A few Indian men have always been engaged in weaving — belts, ceremonial dresses, sashes, and, rarely, blankets; but among the Navajos the women have de-

veloped and controlled the industry for two centuries. Under the matriarchal family system the sheep belong to them, and, although the men help at shearing time, they alone carry through every process from washing to the finished blanket. At nightfall the shepherdess takes refuge with her flock from coyotes and storms under the rim of some shelving canyon. On any summer day, far out on the desert pasture, the young girl with some little brother or sister will be seen sitting on horseback, now and then moving the flock on from one scanty pasture to another. In front of a leafy summer hogán, the older women set up their looms under a tree or a brush shelter from the sun; moving on horseback when necessary, and taking equipment and children with them. When the blanket is finished, the weaver scours it in clean sand, rolls it up in a pad behind the saddle, and with a baby in front on the saddle or on a baby-board, or slung in a shoulder blanket on her back, and often a small child tied to the saddle-strings, gallops away to the nearest trader to exchange it for provisions and luxuries.

NAVAJO BLANKET AND RUG CHART

Blankets classified by age, materials, dyes, and designs

I. *The very old*, of native-spun wool, natural colors (white, rusty black, brownish gray), either all white or striped.

II. *The bayeta* (cochineal dye), of Spanish and English commercial, finely woven baize with a nap on one side, which the Indian women unraveled and retwisted to make a very fine thread. At first only red cloth, afterward cloth of other colors was so used. This material was used either for the whole rug or in combination with the finest-spun native wools. The type made from raveled and respun material of Spanish soldiers' uniforms is very rare. Stripes and geometrical figures were made from about 1700 to 1875.

III. *The native wool, vegetable dyes* (blue, black, yellow, rusty

red, and green, or blue and yellow mixed): the blue native dye was very early superseded by indigo obtained from the Mexicans. This type overlapped the bayetas and outlived them, being easier and less expensive to make, and lasted till about 1875, when commercial dyes became common. In the later ones both vegetable and aniline dyed wools were often used in the same blanket. Blankets of cotton warp produced in this period, though occasionally of good weave and design, are of very little interest or value.

IV. *Germantowns:* made of commercial Germantown wools in many bright colors; or of Germantown unraveled and retwisted after the manner of bayeta. Made from 1875 to 1890, then out of the market for some years; recently revived. The older ones increasing in value.

V. *Modern commercial rugs:* with natural colors.
Grade A: native wool, finely spun, commercial dyes of best quality, pure native designs; smooth in texture, hard-woven, symmetrical.
Grade B: similar to A, but much less good in design and workmanship.
Grade C: rough, heavy, often poor in design, loose and irregular in weave. Among traders usually bought by the pound.

VI. *Modern Commercial Rugs*, with commercial dyes.
Grade A, Grade B, Grade C } similar to Class V.

Note: The Chimayo blanket is native New Mexican. The designs are derived from the Saltillo and other blankets of Old Mexico. The old Chimayo blankets were made of native wool, hand-carded, dyed, and spun, and were woven on a wool warp. Chimayo blankets woven with Germantown or other manufactured yarn, on a cotton warp, are a later commercial product.

In order to judge of the age, fineness, and value of a Navajo blanket, it is necessary to be familiar with the historical development of the industry. The earliest wool blankets were doubtless patterned after the cotton

ones in use among the Pueblos at the time of the arrival of the Spanish conquistadores, and limited to the natural colors of the native wools and their possible mixtures. It is probable that the bright colors worn by the Spanish soldiers stimulated Indian women to invent the vegetable dyes which they shortly began to use.

'Bayeta' is the Spanish term for an English baize of the sixteenth and seventeenth centuries, concerning which there has been a vast amount of confusion and misinformation. In America it has come to be applied to all old blankets woven wholly or in part of fine cloths unraveled and retwisted by the Indian women in order to make the yarn harder and finer, and to gain greater richness of color than could be produced by native materials. One of the first cloths so used was the material of Spanish army uniforms, a heavy broadcloth — the scarlet of the infantry, the yellow of the cavalry, and the green of the medical staff — possibly obtained from the bodies of dead soldiers or from traders who handled discarded uniforms as second-hand goods. Evidently the supply was extremely limited, and very, very few blankets now exist which may be certainly identified as made in this manner. Only an expert dealer can distingush their peculiar texture and characteristic colors from the early bayeta blankets made from Spanish and English baize.

These more common but still rare bayetas are of several kinds: the older consisting of narrow stripes of red Spanish cloth rewoven, interspersed with wider stripes of natural-colored wool; the later type, showing the beginning of modern geometrical designs and not confined to the rewoven red baize. James traces the history of these red and green baizes, manufactured in England for export to Spain, whence it was exported to Old Mexico, and thence brought by the Spaniards to New Mexico as

an article of trade with the Indians. Although the first demand was for red chiefly, there were a variety of colors in English baize which came to be used for barter with the Southwest Indians, and which were unraveled and retwisted in the same way as the red. The 'typical' bayeta is a bright cardinal which fades off, in some examples, to a wonderful soft purplish shade, or sometimes, when washed frequently, becomes a lovely yellowish-rose color. True bayeta often had a little white mixed with it, which shows through, lightening the red color.

Flannels, sometimes called 'Manchester cloth,' similar to baize but less desirable for respinning, were also traded to the Indians, but they were without the heavy nap and so much less firm that the few blankets in which they were used may be easily distinguished from the typical bayeta. Bayetas ceased to be made about 1875 as a result of the introduction of stable aniline dyes and of Germantown yarns, which could be more easily split and respun than the old baizes. The only weaves likely to be mistaken for bayeta by the inexpert are the perfectly spun and hard-woven native wools of the best native period; and the best Germantowns made of retwisted commercial zephyrs.

The age of any bayeta must, therefore, be at least fifty years and may be much more. Only an expert can be depended upon to authenticate any particular blanket or bayeta squaw-dress. The experts have their tests: the type of thread, the color, the design, the 'feel' of the specimen. James says 'it is silky, yet hard and with a fuzzy or rough feel . . . to this is added the ocular demonstration of age and color, the old vegetal dyes of the ancient bayeta toning down to the richest harmonies.' A commercial expert also says it may be told by feeling — 'Not silky, but like a fine emery paper surface, hard-

twisted, with little knots occasionally, close and very firm.' But a well-known collector adds to these the character of the design; and experience in handling is the only means of becoming a competent judge.

Bayetas of the second period — and the native wool, vegetable dye blankets of the third period — were made coincidentally throughout the seventeenth century; but early in the nineteenth century we begin to have more definite historical information concerning the Navajos in the writings of the explorers who occasionally mention these blankets.

In 1863, the great body of the Navajos were moved from their native ranges in northern Arizona to Fort Sumner, in eastern New Mexico, as punishment for repeatedly breaking their treaties with the United States Government. During the four years of their exile there, the tribe received rations, but the women complained to the officers of having nothing to do — they had left their flocks, their spinning, and their weaving behind. At Fort Sumner they saw, perhaps for the first time, bright manufactured yarns and Germantown wools at the trading post, and once more they set up looms and began the new type of blanket known as 'Germantown.' But this wool, though pleasing in color, was not hard and tight-twisted enough to meet Indian standards, and the Navajo women often split and retwisted it, making a blanket almost as fine as the earlier bayeta. These wools were dyed, like the English and Spanish imported cloths, with the old tested commercial dyes of Europe, and the colors were rich and stable.

When, in 1869, the Navajos were permitted to return to their present reservation and were given two sheep to each person with which to start over again, the women no doubt found the old native processes of making the vegetable dyes and spinning native wools slower and

more difficult than ever. The traders on the edges of their domain began to offer them commercial yarns and easy aniline dyes. For a relatively short period (1875–90) the Indian women used the newly invented aniline dyes, at that time unreliable and unstandardized, to produce colors and weaves much inferior to the old ones.

This serves to explain how Germantowns made at this time, of the best commercial wool, were extremely good and lasting, while native wool blankets of the same period faded quickly and were soft and sleazy, being made of coarser wools not sufficiently respun. The introduction of cotton warp at about the same date tended to make the weavers careless of the preparatory processes and with it the quality of their weaving declined. Presently the public began to be aware of the deterioration and refused to buy the newer weaves. Much has been made of this temporary decline in quality, for which the traders were chiefly to blame; but it must not be forgotten that in the wild interior of this great reservation many older women held fast to the old standards and were still producing good native-wool, native-dye blankets.

The more intelligent traders banded together in a policy to make the weavers return to the old methods and refused to accept the poorer rugs [1] in trade. Soon after 1900, the Government began to put in wells upon the reservation which provided better water for the flocks and for the washing of the fleece; and its breeding up of the flocks by the introduction of better stock has produced finer wools. The custom of fairs, established by the traders, at which prizes are offered for the best native industries, has resulted in some modern weaving as good as any that has ever been done. Although ani-

[1] The term *rug* has recently displaced the word *blanket*, since the Indians now seldom wear them and they are sold chiefly for floor coverings.

line dyes are now almost universally used, they have been perfected and standardized until the color is fast and artistically acceptable. As always, first-class rugs are scarce and more and more high-priced, but a grade A and even a grade B rug will be worth generally what the buyer of taste is willing to pay for it, and will constantly increase in value as the Indians cease to weave. The Indian is now able to sell the unwoven wool for enough to enable the family to buy American goods and the woman need no longer weave her blanket for a wage of only a few cents a day.

The beauty of the rug consists quite as much in its symbolic designs [1] as in the color and fineness of the weaving. The earliest blankets were plain white or striped black and white — articles of utility merely. Why and how the Navajo woman began in the eighteenth century to use geometric designs no one can certainly know, but it has been assumed that she received artistic suggestions from the pottery of the cliff dwellings and other ruins, and it is evident that she must have developed them at the same time that the Pueblos were inventing their more modern basketry and pottery designs.

Hollister is somewhat unwarrantably sentimental in saying that 'the poor woman of the mountains wove into her blanket the sad story of her life.' But his interpretation of the blanket designs is interesting, if not capable of proof.

Each of the various figures and patterns woven into the Navajo blanket has its special significance. The diamond figure that appears in many pieces of their work distinguishes a page on which their tribal history is written. The wave pattern, easier described as the lines of an old-fashioned rail fence, is one of the old symbols, and indicates the importance

[1] For fuller discussion see Chapter XIII.

of water to animal and plant life. Squares remind us of the four quarters of the globe, the four seasons and the 'four winds' as they call the four points of the quarters from which they say the winds blow. These are also indicated by the four tassels at the corners of the blankets. The creative spirit in which is combined father and mother is shown in the colors red and black; fire, the father, in red; water, the creative mother, in black; and each also refers to the creation of the world as well as to the origin of plant and animal life. Black is also shown as the color of the north; and blue as the color of the south. Again, red is the male color and blue the female color. A straight line with shorter bars dropping from each end, denotes the storm clouds; and the same figure inverted under it, is a mist rising to meet it. Zig-zag lines mean lightning, and a multiplication of these lines by intersecting them is known as 'the rattlesnake pattern,' the snake among the Indians of the Southwest being closely related to some form of worship. Lines forming steps mean mountains, and rows of little squares refer to Indian villages. . . . A border of complicated lines, often seen, is the rough road the Indian novitiate must travel, before he is competent to sit with the warriors in medicine lodge or around the council fire. Obtuse angles, though rarely found, mean the sky. . . . According to the best information we can get, fret designs indicate mesas and canyons. Inverted pyramids are the whirlwinds as they descend into the canyons. Squares connected with lines indicate a number of families joined by ties of blood relationship.

Dr. Matthews and G. W. James believed that the older designs were certainly emblematic and in the beginning had some relation to the symbolic sand paintings of the medicine men. Obviously the legends, partly historical and mostly folklore, with which all Navajo life is permeated from childhood to age, must have made a deep impression on the minds of women as well as men. But Navajo women are inarticulate: they do not sing nor chant nor even tell the bedtime stories which are a part of the education of children — all their art impulses seem to have been expressed in the colors and designs of

their blankets. It may be doubted whether modern weavers make any definite connection between the original meanings and the symbols still in use. If one asks an intelligent Indian to-day what the design means, he will look embarrassed and perhaps say: 'Not mean anything — maybe long time ago, it mean lightning or mountains.'

The principal figures on good weaves — old and new — are mountains and rivers, trees, clouds, rain, arrows (male and female), whirlwind and lightning; squares, crosses (swastika, double bar, and others), zigzags, diamond, rectilinear fret — all of which may be reduced to straight lines, the limitations of the loom making curves very difficult to weave. But the expert modern weaver occasionally puts in very complicated figures of the Yeibitshai dancers, stalks of corn, or animal forms very much conventionalized. In the accompanying plate of a rug recently woven for the Navajo chief, Henry Chee-Dodge, these figures are particularly fine. Upon another fine modern chief rug there are two open hands in the center; the old chief who gave it as a present explained that in the old days he led his people to war, but now that there is peace between the Indian and the white man, he had the hands woven in, giving the peace sign.

As has already been suggested, color also has its symbolism. In the Navajo story of 'The Emergence' (corresponding to the Hebrew Creation in Genesis, I), the first world was red, the second blue, the third yellow, the fourth mixed black and white; and the colors in the sky were the same as in the lower worlds. The four cardinal points were the same colors, and the five 'sacred' colors of the origin Legend are white, blue, yellow, black, and spotted. Doubtless the Indian women, who know these traditional stories, associate the colors with these myths,

just as we think of heaven as in the sky and hell as the inferno of some lower world.[1]

After all, the Navajo weaver is more remarkable than the work of her hands. Primitive art products are made under such handicaps of meager raw materials, rude tools, and lack of artistic stimulus, that any beautiful object the untutored artist makes is a sort of miracle of originality and handicraft. To appreciate the Navajo blanket, one must visualize a dark, shy, silent creature who can ride half-broken horses with a baby on her back and a child behind the saddle; who climbs and walks and carries burdens as well as her menfolk; who builds her own house — a leafy shelter in summer, a wattled storm-proof circular hogán in winter. She must cook two meals a day on a tiny fire of twigs and brush or grass, where fuel is scarce, and wherever the family happens to stop at the moment. With her children she drives and herds the flock, takes it far to water, protects it from wolves and coyotes and storm in some rocky canyon. Child-bearing is a mere incident in life to her — a few days lying by with the help of some neighbor woman: the sheep are her main occupation. At washing and shearing time the men assist, then the whole tedious, difficult process of rug-making fills the intervals of her laborious days. When the wool is carded, spun from two to five times, and dyed with the simplest, rudest equipment, she hangs her loom of two upright poles and a frame upright under some cedar tree and, sitting on a blanket on the ground, she weaves upward as far as she can reach, then loosens the web, rolls and sews it at the bottom, and begins again to weave upwards until it is finished.

She follows no visible pattern. For generations she has been weaving out of her imagination, yet design, color, and proportion in the hands of an experienced

[1] Matthews.

weaver come out nearly perfect. Apparently she does not even count the stitches — her skill enables her to follow her vision. Like the painter she lays on the color and like the etcher she must get it right the first time, for it cannot be altered successfully when once woven.

She will not copy — not even copy her own work for a price. When the traders buy a good rug that sells well, they want more of that kind, but it is almost impossible to persuade an Indian woman to repeat her work. The cheapest form of product made for the trade is the 'pillow-top.' The Indian maker receives a few skeins of Germantown from the trader, weaves the little square on cotton warp, and receives the cost per pound for her pay, perhaps fifty or seventy-five cents for her work. In a thousand of these squares piled up in the warehouse, no two will be precisely alike. Yet if an artist gives the weaver a new design in water-colors she will reproduce it in wool perfectly.

You may see her, in her velveteen tunic, full calico skirt, and buckskin half-boots, wearing strings of turquoise, silver and shell jewelry — blowzy, strong, and brown — on horseback or on foot, guiding hundreds of sheep and goats — a lonely, fearless figure in the midst of a sandy, half-arid waste. She has no village neighbors, no protector, no society but her family. She owns her house, her children, and her sheep, but she takes no part in the tribal government and has only an inconspicuous rôle in community ceremonies. She does not sing — the menfolk do all the singing — she never talks in public. She is the most shy and modest appearing of women.

Though her husband comes to live in her house when they marry, and though she may divorce him at will by putting his belongings outside the doorway, she seldom turns him out. The division of duty, labor, and pro-

perty between them is perfectly understood. The Navajo woman is perhaps the only woman entirely adequate to her fate: by her strength, her inveterate industry, and her sense of beauty expressed in the rug, she is able to stand alone and is self-supporting. Yet she is, in legend and in fact, the stable center of Navajo life.

PART VIII
DESERT AND RIVER TRIBES

Every tribe must be viewed as contributing to the civilization or civilizations of which it partakes. . . . Both the Southern California and Lower Colorado cultures present numerous relations to the great southwestern Province and it is not open to doubt that many of their constituent elements can be traced back to an origin among the Pueblos or the ancestors or cultural kinsmen of the Pueblos. At the same time it would be a very summary and misleading procedure to consider these provinces an outright part of the Southwest. . . .

In fact, while ethnologists speak constantly of the Southwest as if it were a well-defined ethnic unit, what they generally have in mind is the Pueblo with perhaps the addition of their town-dwelling ancestors or of the interspersed and Pueblo-influenced Navaho. No satisfying picture that gives proper weight to the unsettled as well as the agricultural tribes has yet been drawn. . . . The Pima are closely linked with the Pueblos, and in other respects with the Lower Colorado tribes, but to unite them nonchalantly with either would be inadmissible. But so far as they are southwestern, the Papago are; and if the Papago, then, in some measure at least, the Yaqui and Seri also.

The truth is, that the Southwest is too insistently complex to be condensed into a formula or surrounded with a line on the map. Essentially this is true of every culture.

A. L. Kroeber

CHAPTER XXX

TRIBES OF THE LOWER DESERT — PIMAS, PAPAGOS, MARICOPAHS

The modern Pimas comprise three divisions of Piman stock, the Pimas Bajos of Mexico, the Pimas Altos of Arizona, and the Papagos. According to their own traditions they once occupied the Salt River Valley as far down as the mouth of the Gila River. Cabeza de Vaca described them as successful farmers and irrigators in the sixteenth century. Their average wheat crop was estimated at two million pounds a year, besides large quantities of corn, pumpkins, beans, cane, and vegetables. They made earthen jars and baskets, wove cotton blankets, and lived in villages. They were always friendly to the whites and helped their neighbors to fight off the Apaches.

The prehistoric dwellers in this region had extensive canals, reservoirs, and adobe villages similar to the pueblos farther north; but these were destroyed and fell into disuse during the wars with the nomads. Some of the Piman stock ultimately settled in Mexico; others went into the mountains at the north, and when they returned were not able to rebuild these ancient works. The Pimas have a legend that the interesting prehistoric ruin, Casa Grande, near Florence, Arizona, was built by one of their clans; but scientists now attribute it to some prehistoric Hopi or Zuñi clan.

At present the Pimas of Arizona number altogether about seven thousand, including the remnant of the Maricopahs. Of these, thirteen hundred are living on the Salt River Reservation, northeast of Phœnix, and

are slowly increasing in numbers. Forty-three hundred live on the Gila River Reservation, which comprises 1,200,000 acres of desert which can only be made productive by irrigation.

The Salt River Indian Agency, about fourteen miles northeast of Phœnix, Arizona, has an area of 51,000 acres and a population, in 1925, of 963 Pimas and 127 Maricopahs. Camp McDowell, with an area of 24,000 acres, is the home of some two hundred Mojave-Apaches.

After a visit in 1925, Mr. Malcolm McDowell, of the Board of Indian Commissioners, reported:

> The Pima and Maricopah were using the water of the Salt River for irrigation long before any white men came into the valley. Consequently they had the best of prior rights, when the Salt River irrigation project (more commonly known as the Roosevelt Dam project) was started and the water appropriated by Court decree. The Indians were allotted 700 miners' inches of water when they should have had at least 416 inches more. As a result, these Indians, to whom were allotted thirty acres of land with at least five having assured water rights, are getting water only sufficient for 3.14 acres. There is now a prospect that they will get more water.

The history of the Pimas for the last thirty years is told in the struggle for their ancient rights to water in the Gila River. From time immemorial they had supported themselves by agriculture. After the Apaches ceased to harry them, they were prosperous and progressive, until about 1900, when their water supply began to be cut off by settlers above the reservation. As early as 1899, engineers of the United States Geological Survey called attention to their perilous situation:

> The lands of this reservation are arid, the annual rainfall being seven or eight inches, a large portion of the precipitation occurring during the non-growing months. . . . The growth of all crops in this district is wholly dependent upon irrigation . . . what is true of the Indian reservation also applies to all

the adjacent lands of the Gila River Valley. Wheat, barley, corn and alfalfa grow luxuriantly when watered. The deciduous fruits flourish.

But no very serious shortage occurred until after the construction of the Florence Canal and its diversion dam, fifteen miles above the eastern limit of the reservation. In 1886, the Agent called attention to this menace to the rights of the Indians, and the survey which followed established the facts that the water was then no more than needed by them, and that if the supply were cut off the reservation would become uninhabitable. But from this time on the supply decreased. 'Year after after year they plowed and sowed and irrigated their crops only to have them destroyed by drought before maturity.' The Indians began to eke out a scanty living by hauling wood and other precarious work, and some became dependent on charity.

Meanwhile, settlers increased and large interests attempted to have the Indians moved to San Tan, where the Government was to put down seven wells from which irrigation water was to be furnished. The Indians and their friends protested that these wells would supply alkali water which would ultimately ruin the land; that the machinery for pumping was complicated and expensive; what was needed was a dam on the river to which the Indians should have a prior right for the water needed. Ten years of protest, delay, and Congressional investigation and recrimination followed, during which the Indians had less and less water and were gradually driven to become semi-nomadic. With the scanty water available, they raised what was possible, and then moved every season into the mountains with their stock to keep alive till they could return to their farms.

By 1911, Government engineers decided that the best

dam site was at San Carlos, where the Agency of the Apaches was already located. The cost was estimated at one million dollars, and the project would involve transferring the Agency to a point some miles away, moving several miles of railway track and two bridges, and the reimbursal of the Apache reservation for the damages to their property. Although detail plans were ready in 1915, the enabling act for building the San Carlos project was not passed until 1924, and the preliminary steps were still going on in 1926, with a probability that the dam will be completed in 1930.

Certain smaller projects have been put through which should be beneficial to the Pimas: the Ashurst-Hayden diversion dam, completed in 1922, embraces 35,000 acres on the reservation and 27,000 acres in white ownership in the Florence–Casa Grande Valley; the diversion dam with bridge across the Gila River at Sacaton, Arizona, was completed in 1925; and a system of canals and laterals, to be completed when the San Carlos project shall be at last accomplished.

The diversion of the Gila River water deprived the Pimas of many food products on which they formerly depended. They had been accustomed to hunt and fish and gather clams, but with irrigation diversion above, all the aquatic animals and birds as well as shellfish disappeared. As the mesquite is used up for fuel, the beans which were once used for flour are no longer to be had. Their chief food supply comes now from a few cattle, hogs, and poultry, with a very little wheat and alfalfa when the water is sufficient.

Some now make a living by roadwork, freighting, and cotton-picking in the season. The women make baskets for sale — some as fine as any produced in the Southwest. The materials are willow and cottonwood splints, with cat-tail reeds for the coils, and with de-

signs in black figures of animals and men made of *martynia* (cat's-claw). The basketry designs seem no longer to have symbolic meanings. Their pottery is ordinary; and they weave nothing but the net carrying-baskets.

The Pimas dress very much as do their white neighbors and their dwellings compare favorably with those of white working people. Occasionally old-time customs are seen in the tattooing on old women's faces and in the ball-kicking games of the men. The majority live in two- and three-room adobe houses. The general health is good, the percentages for tuberculosis and trachoma being low.

Christian standards of life prevail to a considerable extent: the position of women is similar to that among the whites; and, according to Lindquist, the Church is the dominant influence in directing public opinion. Father Garces worked among them as far back as 1775 and Protestant missionaries since 1870. A number of organized churches have native leaders. The Indian Bureau in 1926 reported 1165 children of the Gila Reservation and 354 of the Salt River Reservation, in boarding and day schools.

When once the water supply is made adequate to the needs of the Gila River communities, the Pimas may be expected to progress steadily toward assimilation. Even under the uncertain economic conditions of the last twenty years, they have made highly creditable advances.

The Papagos are closely allied to the Pimas and of the same linguistic stock. For centuries they have occupied the desert region known as 'Papagueria,' south of the Gila River and westward from Tucson, comprising most of what is now Pima County, Arizona, and extending over into Sonora. Like the Pimas they were naturally peaceful village people, and in very early times

raised corn, beans, and cotton by irrigation, to which they added mesquite beans and sahuaro preserves and syrup. They gathered and sold salt to the neighboring settlements, and were always friendly to the whites, though for ages compelled to defend themselves against the Apaches and predatory Mexicans.

From 1885 onward, they began to suffer from white encroachments. Mining companies moved into Papagueria and used up the mesquite wood, depriving the Indians of the annual crop of beans; cattle companies began to graze their stock on Papago lands and usurped the scanty water. Although Government Agents in charge of these Indians repeatedly reported these depredations to Washington, for a period of twenty years — indeed, until 1911 — no engineering survey or report upon the resources of Papagueria nor the needs of these Indians was made.

The Papagos were then living on their desert in villages ten to twelve miles apart and averaging from a very few to as many as 115 houses each. Most families had come to have two homes — one in some valley near their small patches of cultivated land and the other in the mountains. In perhaps one hundred such settlements there was an estimated population of six thousand persons. The rainfall in this region averages less than ten inches a year, and the Indians through ages of experience have become extraordinarily ingenious in conserving their little water supply in 'charcos' — ponds — so as to get the utmost return. The engineers reporting on these conditions give them credit for having cultivated every available acre with their system of desert irrigation. When the tanks became slimy and exhausted, the whole village with its animals moved into the mountains.

By 1915, the Government had taken some measures

for protecting their water against the encroachment of the cattle companies and prosecuted a successful suit in the name of the Indians, which finally gave them title to the reservation of 2,275,000 acres on which they had lived for many generations.

During the last century, the Papagos have been separating into groups differing widely in degree of civilization. The agricultural villages, whose economic conditions have been most favorable, are already a developed people, industrious, ambitious, and on the road to being useful citizens of their communities. In 1925, during an unusual drought, one hundred of them met with the visiting Indian Commissioner to discuss their situation, but they did not require charitable assistance. The men take outside work on ranches, railroads, in the mines, and are regarded as excellent laborers drawing good wages. At the other end of the social scale there are perhaps a thousand wandering Papagos along the Border who live mostly on desert products.

The original reservation of 41,606 acres at San Xavier, just south of Tucson, has been allotted in severalty and is under irrigation. In 1922, Lindquist reported that the tribe had thirty thousand cattle, some hundreds of scrub ponies, and were 'independent and self-reliant,' having no annuities, no rations, and no fees from leased lands. A thousand or more were then occupied in seasonal labor in the adjacent white settlements and several hundred women were making baskets for sale.

These Indians have been under religious instruction from the Franciscans and the Jesuits for more than two centuries and four fifths of those that have religious affiliations are Roman Catholics. Since 1903, five Presbyterian missions have been established and some native as well as white missionaries are being employed, not only among the Papagos, but also among the peace-

ful Yaquis who have been coming across the Border since the Mexican Revolution.

The Indian Bureau in 1926 listed seventeen schools under the Sells Superintendency for the Papagos, of which three are mission boarding-schools, ten mission day schools, and four Government day schools with a total enrollment of 813, and perhaps almost as many more children not in attendance at any school. The Woman's Board of Home Missions has maintained near Tucson for forty years a training school for Papagos and Pimas, carrying eight grades and tolerably well equipped, though needing enlarged capacity. In general the Papagos are healthy, except for trachoma infections, but hospital accommodation is limited to Tucson, and field matrons are too few for so great an area. The primitive dances for rain-making have long since died out and the *fiesta* takes their place. Gambling, tiswin drinking, and other vices are infrequent.

The Maricopahs, although of Yuman stock, joined with the Pimas and the Papagos when they were raided by the nomadic Apaches, and long ago moved from the Lower Gila to settle with the Pimas, with whom they have since intermarried. At present they are on the Salt River Reservation, northeast of Phœnix, Arizona, and on the Gila River to the south. The Maricopah tribe has now decreased to less than one hundred persons, who are still distinctive in appearance, being taller and more muscular than their neighbors. They were always monogamists and cremated their dead; and they still build the typical brush houses characteristic of the Yuman tribes. The women make fine shallow basket trays of willow with black designs and red pottery decorated in glossy black.

CHAPTER XXXI

THE RIVER TRIBES — HAVASUPAIS, WALAPAIS, YUMAS, MOJAVES, MOJAVE–APACHES

The tribes of the Yuman stock on the lower reaches of the Colorado and the Gila Rivers are now regarded as the typical and earlier desert peoples, which once occupied a large territory around the head of the Gulf of California extending westward across Southern California, and from the Grand Canyon to Yuma. It is difficult to keep them differentiated because some of them do not live in their original habitats and all have been much changed by the invasion of white people into their country. Professor Kroeber comments on the fact that, although the Yuma, for instance, have 'provided a name not only for an Arizona city and county and a fort and reservation in California, they are not the central nor prominent tribe of the group.' In his opinion 'the Mojave are the most concentrated, energetic, and characteristic form of the river civilization,' but 'in their agriculture, manufactures, clothing, hairdress, houses, warfare, and tribal sense the Yuma and Mojave seem to be virtually identical.'

The Yuman groups now living in the extreme Southwest are the Havasupais and the Walapais, of western Arizona; the Chemehuevis, who long ago occupied the valley of their name in southeastern California; and the Yumas, whose range was once the Colorado River bottom about the mouth of the Gila. They now live on a reservation in California, on the west side of the Colorado River, opposite the city of Yuma.

The Havasupais (blue or green water people), called Cosninos by early Spanish writers, once roamed widely

along the Little Colorado River, and later in the San Francisco Mountains. In recent times they have lived in great isolation in Cataract Canyon, eight miles south of the Grand Canyon, on a reservation set aside for them in 1880. Their picturesque settlement is reached by a steep trail and lies in the midst of wild, romantic scenery. Although they speak a dialect similar to that of the Walapais, they are peculiar in having a culture similar to that of the Pueblos.

In summer they live in brush shelters, in winter in caves. They formerly wore buckskin and painted their faces. They grow corn, melons, pumpkins, and peaches by irrigation, and use the wild seeds, datil, and mescal plants found in the region. In winter they get some wild game. The women make baskets for sale, the men earn something by wood-cutting, but in general they are on the verge of extreme poverty and are slowly decreasing in numbers. Although their lands amount to fifty thousand acres, very little can be cultivated and they have no live stock. Of the present population (181 persons), 52 children are eligible for school attendance, of whom two thirds are in boarding-school.

The Walapais (pine-tree people) once ranged along the Middle Colorado River, from the great bend eastward into the interior of Arizona, living principally on small game and wild seeds and plants. The reservation set aside for them in 1883 consists of more than a million acres of mountain and arid lands south of the Grand Canyon. On account of their nomadic habits and the barrenness of their reservation, they scarcely stay upon it even now, but wander on to the Navajo and Hopi reservations, an all but homeless and degenerating tribe. The reservation water rights, scanty enough at best, were long since taken by the whites, and at times these Indians have had to steal even their drinking-water.

Early writers speak of them as brave, enterprising, and physically well-set-up, but of all the lower desert tribes they are now the most miserable in appearance. Infected with white men's diseases and lacking suitable food, they have steadily declined in numbers from 728 in 1889 to 432 in 1926. At present the tribe owns about 1500 cattle, and grazing fees provide their chief income, eked out by the sale of crude baskets made by the women.

They keep their old superstitions, customs, and religion, and are very difficult to reach with educational and health measures. A Government boarding-school in Truxton Canyon provides for more than two hundred Navajo and Walapai children, and hospital facilities and a field matron are attached to the school. The Plymouth Brethren have a mission here which does social work among the Indian camps.

THE MOJAVES, of all the Yuman tribes, were the most numerous and the most warlike. Formerly classified with the Indians of the Southwest, they are now as often spoken of as belonging to the California Indians, for reasons aptly stated by Professor Kroeber:

> Their valley lies in what is now three states: California, Nevada and Arizona. As the channel of the Colorado has flowed in recent years, most of the bottom lands lie on the eastern side; and there the bulk of the settlements were. But the land is so shut in by the high desert and so dependent on the river that it is an inevitable unit. East and west, the left bank and the right, are incidental. The stream course is a furrow that separates Arizona from California, as culturally it divides the Southwest from California; and whoever lived in the trench belonged as much, and as little, to the one area as the other.

To the mind of the layman, the river itself relegates the Mojaves to the peoples of the Southwest, and they are the most numerous and in some ways the most

interesting of the Indians on the lower desert. Dr. Dorsey saw and described them twenty years ago when they were more primitive than now. He says:

> The Mojave are good natured, peaceable, industrious and generous to a degree. The men are tall and finely proportioned, very few of them being below six feet in height. Their features are rather regular, their eyes large and shaded by long lashes. The men take pride in the care of their hair which is allowed to hang loose down the back. The women wear their hair shorter than the men. It is brushed down the back and cut straight across the forehead near the eyebrows. They are invariably short in stature and always have happy faces. Both men and women delight in wearing upon their necks coils of blue and white beads. Shoes and hats are seldom worn. Both sexes more or less elaborately paint the face in bright colors.
>
> Gambling is their most common vice. It is no uncommon thing for them to stake and lose every article of their wearing apparel after the loss of their money. Their homes are rude shacks, simply grass-covered sheds for summer, and in winter mud huts. They sleep upon the ground, protected from the cold, surrounding a small fire in the center of the lodge.
>
> They are deficient in the arts. In the making of pottery, however, they display patience, judgment and artistic taste. In the manufacture of clay dolls they display considerable ingenuity.

At present (1926) they number altogether about 1250 — 400 located on the Colorado River Reservation near Parker, about 500 on the Fort Mojave School Reservation, and 350 living, since 1861, mostly on the edge of the town of Needles, on railroad lands which they claim as their own, but to which they have no title.

This colony at Needles is of special interest. Its people are self-supporting by work in the railway shops, by freighting, fishing, and the sale of beadwork. They live in neat houses with dirt floors similar to the Mexicans, pay town water rates, and, according to Lindquist,

are healthy, orderly, and fairly prosperous people. They are under the control of the Colorado River Agency at Parker, and the Government, in recent years, has endeavored to give them allotments at Fort Mojave, and recently at Parker, with the promise of irrigation facilities for ten thousand acres. The Indians, however, decline to move, preferring their certainty of making a living to the uncertainties of developing desert allotments. At Needles there is a Presbyterian mission and the Indian children attend the public schools.

The Colorado River Reservation, set aside for the Mojaves by the Government in 1865, comprises 240,699 acres. In modern times the Mojaves have lived by agriculture, raising wheat, corn, cotton, and vegetables in patches along the river. The river rises annually in May and June and floods the bottom lands; sloughs from this overflow remain for months and the level tracts are coated with soft mud. In this the Mojaves do their planting with a primitive digging-stick, and under the fierce sun the crops ripen rapidly. The women make poor baskets and much beadwork for sale to travelers. In 1926, there were sixty-eight children in the reservation boarding-school, and the Presbyterians have a mission church at this point. At Fort Mojave there are more than two hundred children attending the reservation boarding-school.

The Chemehuevis are located in the valley called by their name in southeastern California, and though not related to the Mojaves, are controlled by the Government Agency for the Mojaves, at Parker. They are of Shoshonean stock, an offshoot probably of the Pai-Utes of the north, and once were a considerable tribe. At present they number about three hundred and fifty persons, and live on desert products, by small farming, and by working on the railroad.

Dr. Dorsey says they build good houses, as a rule dress better than the Mojaves, and speak some Spanish and English. The women are expert basket-makers. Their culture is of scientific importance and has lately been described by Dr. Kroeber in the 'Handbook of California Indians.'

The Mojave-Apaches (Yavapais), of Yuman stock, numbered in 1926 about two hundred Indians, settled at Camp McDowell under the Salt River Agency, on an area of twenty-four thousand acres. Mr. Malcolm McDowell, reporting to the Indian Commissioners in 1925, said:

> The area of irrigable agricultural land on the Camp McDowell Reserve is put down as 1300 acres, but several hundred acres of this land cannot be reached by water unless some very extensive and expensive irrigation work is done. Some years ago the Indian Office conceived the idea of inducing these Mojave-Apaches to become irrigation farmers. With that purpose in mind 1300 acres of good land, in a solid block, were set aside on the Salt River and divided into five-acre lots. Canals and ditches for irrigating this land were built and the Mojave-Apaches were urged to move south and make their homes on this irrigable tract of land. They flatly refused to do this. . . . At the time they believed this plan of making irrigation farmers of them was part of a scheme to rob them of their grazing lands in the Camp McDowell Reserve.

Commissioner McDowell advised the Indian Office to drop the project, turn the 1300 acres back to the Pimas, and immediately allot agricultural lands on the McDowell Reserve to the Mojave-Apaches; in order, as he said: 'to allay the deep-seated suspicions of the good intentions of the Indian Office.'

The Yumas, an agricultural tribe on the lower desert, may have been the first tribe discovered by Caucasians in California, says Dr. Kroeber; at any rate, they occupied the territory on the Colorado River above and

below Fort Yuma, between the Cocopah of the south and the Mojave at the north. They, like all these river tribes, suffered from attacks by the Apaches. At Fort Yuma there is now an Indian school and a reservation on the California side of the river.

The Yumas are exceptionally tall, fine-looking, with small hands and feet greatly enlarged by much walking on the heated sands of the desert. They now wear ready-made clothing, but no shoes or hats, and their hair is long and treated with mesquite gum to keep it glossy. They live in brush shelters in summer and in adobe houses in winter. For irrigating their crops they depend on the spring rise of the Colorado River; but are chiefly employed as day laborers in this region where white labor cannot endure the intense heat of summer. These Indians are fond of sports — foot- and horse-races, wrestling, swimming — and gambling games. The women make an ordinary type of pottery. In culture they are almost identical with the Mojaves.

THE END

BIBLIOGRAPHY

THE brief Reading List given below consists of relatively recent books likely to be found in public libraries and intended for the general reader.

The larger part of the most valuable material on the Southwest Indians is to be found in Government publications and in scientific monographs issued by learned societies. A list of recent and accessible bibliographies and reference books is provided, which may serve as a guide for the intensive study of topics discussed in the several chapters of this book.

READING LIST

ALEXANDER, HARTLEY BURR:

Myths of All Races, vol. X, chaps. VIII, IX. Boston, Marshall Jones Company, 1926.

AUSTIN, MARY:

The American Rhythm. Harcourt, Brace & Co., 1923.

The Land of Journeys' Ending. New York, Century Co., 1924.

BANDELIER, ADOLPHE G.:

The Delight Makers. New York, 1918. A novel of the Rio Grande Pueblos. See also a list of his scientific papers in Kidder's *Bibliography.*

BARNES, NELLIE:

American Indian Love Lyrics and Other Verse. New York, Macmillan, 1925. Bibliography, 40 titles.

BURLIN, MRS. N. C.: *See* CURTIS, NATALIE.

COOLIDGE, DANE:

Under the Sun: Novel of the Navajo Exile in 1863–69. New York, E. P. Dutton & Co., 1927.

CRANE, LEO:

The Indians of the Enchanted Mesa. Hopi and Navajo. Boston, Little, Brown and Co., 1925.

CREMONY, JOHN C.:

Life Among the Apaches. San Francisco and New York, A. Roman & Co., 1868.

CRONYN, GEORGE W., *Editor:*
The Path on the Rainbow: The Book of Indian Poems. New York, Boni & Liveright, 1918.

CURTIS, EDWARD S.:
Indian Days of Long Ago. New York, World Book Company, 1914.

CURTIS, NATALIE (MRS. BURLIN), *Recorder and Editor:*
The Indian's Book. New York, Harpers, 1907, 1923.

DENSMORE, FRANCES:
The American Indians and Their Music. New York, The Woman's Press, 1926.

FYNN, A. J.:
The American Indian as a Product of Environment. Boston, Little, Brown & Co., 1908.

GODDARD, PLINY EARLE:
The Indians of the Southwest. New York, American Museum of Natural History, Handbook Series, no. 2, 1921 (2d ed.)
Myths and Tales of the San Carlos Apache. American Museum of Natural History, New York, 1918.

GRANT, BLANCHE C.:
A series of booklets on Taos Pueblo. Taos, New Mexico, 1925 ff.

GUTHE, CARL E.:
Pueblo Pottery-Making: A Study at the Village of San Ildefonso. Bibliography, 11 titles. New Haven, Yale University Press, 1925.

HEWETT, EDGAR LEE:
Archæological papers (15 titles) listed in Kidder's *Bibliography.* Others published in *El Palacio Review* and archæological journals.

HOLMES ANNIVERSARY VOLUME. F. W. HODGE, *Editor:*
Anthropological essays, etc. Washington, 1916. Printed at the J. W. Bryan Press.

HOUGH, WALTER:
The Hopi Indians: Customs, Home Life, Ceremonials, etc. Cedar Rapids, Iowa, 1915. See also papers listed in Kidder's *Bibliography.*

JAMES, GEORGE WHARTON:
Indians of the Painted Desert Region, 1904. Bibliography.
Indian Blankets and Their Makers. Chicago, A. C. McClurg, 1920.
New Mexico, the Land of the Delight-Makers. Boston, L. C. Page & Co., 1920.

KIDDER, ALBERT VINCENT:

Introduction to the Study of Southwestern Archæology. New Haven, Yale University Press, 1924. Bibliography of 300 titles arranged by authors in chronological sequence.

LEUPP, FRANCIS E.:

The American Indian and His Problem. New York, Scribner's, 1910.

LINDQUIST, C. E. E.:

The Red Man in the United States: A Survey of Social, Economic and Religious life. Statistics. Bibliography of 90 titles includes novels, folklore, songs and games and missionary reports.

LUMMIS, CHARLES F.:

Pueblo Indian Folk Stories. New York, 1910.

Mesa, Canyon, and Pueblo. New York, Century Co., 1925.

MATTHEWS, WASHINGTON:

Navajo Legends. Published in American Folk-Lore Society *Memoirs*, vol. v, New York, 1897. Bibliography by F. W. Hodge, 38 titles.

The Mountain Chant: A Navajo Ceremony. Washington, 1883–84. Fifth Annual Report, Bureau of American Ethnology.

The Night Chant: A Navajo Ceremony. Memoirs of American Museum of Natural History, vol. I, 1902.

MERRIAM, LEWIS *and* ASSOCIATES:

The Problem of Indian Administration. Baltimore, 1928, Johns Hopkins Press.

PARSONS, ELSIE CLEWS:

American Indian Life. New York, Huebsch, 1922. Bibliography.

The Pueblo of Jemez. New Haven, Yale University Press, 1925.

RADIN, PAUL:

The Story of the American Indian. New York, Boni & Liveright, 1927.

RYAN, MARAH ELLIS:

The Flute of the Gods. New York, Frederick Stokes & Co., 1909.

SAUNDERS, CHARLES FRANCIS:

The Indians of the Terraced Houses. New York, Putnam's, 1912.

SEDGWICK, MRS. WILLIAM T.:

Ácoma, the Sky City: A Study in Pueblo-Indian History and Civilization. Cambridge, Harvard University Press, 1926. Bibliography, 140 titles.

SPINDEN, HERBERT J.:

Home Songs of the Tewa. Journal of the American Museum of Natural History, New York, vol. v, no. 2.

TROYER, CARLOS:
Traditional Songs of the Zuñi. Philadelphia, Theodore Presser & Co.

VERRILL, A. HIATT:
The American Indian: North, South, and Central America. New York, D. Appleton & Co., 1927.

WISSLER, CLARK:
The American Indian. An Introduction to the Anthropology of the New World. Oxford University Press, American Branch, New York, 1922 (2d ed.). Bibliography, 222 titles.
The Relation of Nature to Man in Aboriginal America. Oxford University Press, American Branch, New York, 1926.

BIBLIOGRAPHIES, RECENT AND ACCESSIBLE IN PUBLIC LIBRARIES

ALEXANDER, H. B.:
Myths of All Races, Vol. x, 28 titles referring to the Southwest Indians.

BARNES, NELLIE:
American Indian Love Lyrics, etc., 1925, 40 titles.

GUTHE, CARL E.:
Pueblo Pottery-Making, 1925, 11 titles.

KIDDER, A. V.:
Introduction to Southwestern Archæology, 1924, 300 titles in chronological sequence.

LINDQUIST, C. E. E.:
The Red Man, etc., 1923, 90 titles — novels, folklore, songs and games, missionary reports.

SEDGWICK, MRS. W. T.:
Ácoma, the Sky City, 1926, 140 titles relating to the Pueblos.

WISSLER, CLARK:
The American Indian (2d ed., 1922), 222 titles chiefly relating to anthropology.

A catalogue of Government publications on Indians is for sale by the Superintendent of Public Documents, Washington. 1928.

The publications of the Bureau of American Ethnology and of the Smithsonian Institution should be consulted for important monographs on topics referred to in the text of this book, under the names of:

Bandelier, A. G.
Culin, Stewart.
Cushing, Frank.
Fewkes, J. W.
Hewett, Edgar Lee.
Hodge, F. W.
Holmes, W. H.
Mason, Otis T.
Matthews, W.
Mindeleff, Cosmos.
Russell, Frank.
Stevenson, James.
Stevenson, Mrs. M. C.

REFERENCE BOOKS AND PUBLICATIONS

Handbook of the American Indian North of Mexico, 2 vols. Edited by F. W. Hodge. Washington, 1907–10.

Handbook of the Indians of California. A. L. Kroeber, Washington, 1925. Contains recent material on tribes of Colorado River and Lower Desert as well as of California.

An Ethnologic Dictionary of the Navajo Language (out of print).

A Vocabulary of the Navajo Language, 2 vols, 1912.

A Manual of Navajo Grammar, 1926.

All three published by the Franciscan Fathers, St. Michaels, Arizona. Indispensable to the study of language and customs of the Navajos.

Publications of the American Museum of Natural History, New York.

El Palacio, semi-monthly review, published by the Museum of New Mexico and the School of American Research, Santa Fé.

ACKNOWLEDGMENTS

ACKNOWLEDGMENT is made herewith to the following authors, publishers, and societies for their courteous permission to quote material in print and in manuscript.

Alexander, Hartley Burr: From Chapter VIII and Chapter IX on the Southwest Indians, in *Myths of All Races*, Vol. X, published by the Marshall Jones Company, Boston, Massachusetts.

Bureau of American Ethnology, as indicated under the names of the several authors, and in the Bibliography, pp. 309–13.

Coolidge, Dane: From unpublished translations of Navajo myths and poetry; and for many photographs.

Curtis, Edward S.: From *The North American Indian* (1907).

Curtis, Natalie (Mrs. Paul Burlin), Editor. From *The Indian's Book*, published by Harper and Brothers, 1907, 1923.

Goddard, Pliny Earl: Poems from the Apache, published by the American Museum of Natural History.

Guthe, Carl E.: From *Pueblo Pottery-Making*, No. 2, Papers of the Southwestern Expedition, for the Department of Archæology, Phillips Academy, Andover, Massachusetts. Published by the Yale University Press, 1925.

Hough, Walter: From *The Hopi*, published by the William Harvey Miner Company, St. Louis, Missouri.

Kidder, Albert Vincent: From *Introduction to the Study of Southwestern Archæology*, No. 1, Papers of the Southwestern Expedition, for the Department of Archæology, Phillips Academy, Andover, Massachusetts. Published by the Yale University Press, 1924.

Also: From his *Introduction* to Guthe's *Pueblo Pottery-Making.*

Matthews, Washington: From *Navajo Legends*, published by Houghton Mifflin Company, Boston, for the American Folk-Lore Society, 1897.

Also: From *The Mountain Chant*, Fifth Annual Report, Bureau of American Ethnology, 1887.

Mindeleff, Cosmos: From *Navajo Houses*, Seventeenth Annual Report, Bureau of American Ethnology.

Russell, Frank: From *The Pima Indians*, Twenty-sixth Annual Report, Bureau of American Ethnology.

Spinden, Herbert J.: From *Home Songs of the Tewa*, American Museum of Natural History.

Stevenson, Mrs. M. C.: From *The Sia*, Eleventh Annual Report, Bureau of American Ethnology.

Troyer, Carlos: From *Traditional Songs of the Zuñi.* Copyright by the Theodore Presser Company, Philadelphia.

INDEX

INDEX

Abalone, 97
Ácoma, language of, 11; history of, 17, 18; pottery wares of, 90
Adobe, 39, 40
Agriculture, 47–52
Alexander, Hartley Burr, on the Southwest, 38; on symbolism of Snake Dance, 138; on primitive poetry, 153; on Navajo religion, 263; on Night Chant, 267, 268; quoted or referred to, 176, 196 *n.*, 236
Alsate, Chief, 225
Altars, ceremonial, 121
Alvarado, Hernando de, 32
Andrews, Roy Chapman, of Third Asiatic Expedition, 209
Animal drawings, conventions of, 110
Animal life, adapted to rainfall, 5, 6
Antelope Ceremony, 20, 35
Antelope Fraternity, 132
Antelope Race, 132
Apachedom, 220
Apaches, language, 11; warlike, 221, 230; the name, 221; organized in bands, 221; names of their bands, 221; band-changing, 221; good and bad, 222; warfare with, 222–27; treatment by U.S. Government, 227–29, 237–39; physically considered, 232; politically considered, 232; food, 232, 233; dwellings, 233; utensils, 233; dress, 234; weapons, 234; occupation, 234; hardihood of, 235; recreations, 235; marriage customs, 235, 236; ceremonials, 236; mythology, 236, 237; in the World War, 239; the modern, 239–44
Arizona ceremonials, 124–44
Arrow-chipping, 98
Artist-potters, 83, 85, 87, 88
Arts, pueblo, decline of, 78, 79
Ashhurst-Hayden dam, 296
Austin, Mary, 153, 155
Awa-Tsireh, painter in water-colors, 29, 103

Bácabi, history of, 18
Baize, 281, 282
Bandelier, Adolph F., 18, 171
Bartlett, John Russell, his 'Personal Narrative,' 233
Basket Dances, 142, 149
Basket-Makers, 212
Basket-plaques, 18, 25
Basketry, 21, 70, 71; symbolism in, 107
Baskets, the open line on, 110, 111
'Bayeta,' 281–83
Beading, 70
Bering Strait, 207–10
Blanket dresses, 70
Blankets, Hopi, 275, 276; Navajo, 278, 279; classification of, 279, 280; historical development of industry, 280–85; designs of, 285; colors of, 285
'Blessing the House,' ceremony of, 99
Bosque Redondo, 255, 259
Bourke, John Gregory, on weaving among the Indians, 69
Braiding the Peace Belt, 150
Bread, 51
'Breath-body.' *See* Soul
Brotherhoods, 120
Buffalo Dance, 126, 150
Burial, 65, 66
Burlin, Mrs. Natalie Curtis, quoted, 68, 116. *See* Curtis, Natalie

Caciques, 120, 124
Cahill, E. H., on Indian painting, 104
Calhoun, J. C., Commissioner of Indian Affairs, 224
Camp McDowell, 294
Camp Verde Reservation, 243
Carding, 278
Carleton, Gen. James Henry, his plan to conquer the Navajos, 253–55

Carson, Kit, 223, 253
Casa Grande, 293
Casteñeda, Pedro de, 14, 41
Ceremonial calendar, Arizona, 124–30; New Mexico, 145–51
Ceremonial designs, in sand painting, 99
Ceremonial dress, 42–44, 122
'Ceremonial space,' 111
Ceremonies, dates of, in various pueblos, 17–36, 124, 125, 145, 146; *see* pueblos by name; preparations for, 37; baskets used in, 72; sand painting in Powamu ceremony, 102; significance of, 116–23; attitude of white people toward, 117; major and minor, 118, 122, 123; duality in, 120; brotherhoods, 120, 122; altars, 121; prayer sticks, 121; costumes, 122; masks, 122; Snake Ceremony, 131–39 (cf. 20, 21, 25, 35, 72); autumn, Arizona, 140–44; of Apaches, 236. *See* Ceremonial Calendar
Chaco Canyon, 214
Chants, 100, 133, 265–72. *See* Songs
Chapman, Kenneth M., quotation from, 68; on Indian symbols, 108, 109, 112
Chee-Dodge, Henry, Navajo chief, 287
Chee Teasi-Ah (Red Point), sand painting of, 102
Chemehuevis, 301, 305, 306
'Chicken-pull,' 170
Childbirth, 62–64
Children, 57–59; burial of, 66
Children's amusements, 170, 171, 235
Chimayo blankets, 280
Chimoney, Andrew, running feat of, 11
Chiricahua Reservation, 226
Chiricahuas, 221, 223
Cibicus, 221
Cibola, cities of, 36
Civil War, 223, 224
Clan and family, 54, 55
Cochise, Chiricahua chief, 225, 226
Cochití, history of, 18, 19; etiquette attending childbirth at, 63, 64; pottery wares of, 89
Coiled plaques, 107
Colorado, Mangas, 225, 226
Colorado River Reservation, 305
Colors, symbolism of, 287
Comanche Dance, 150
Comanches, 255
Conventionalization, 107
Conventionalized symbols, 108–14
Coolidge, Dane, 102, 244, 266
Corn, 47–52
Corn Ceremony, 30, 103, 147
Corn-grinding, 41, 62; songs, 162
Coronado, Francisco Vasquez de, 14, 94
Costumes, ceremonial, 122
Coyoteros, 221
Crane, Leo, 21; quotation from, 38
Crazy Horse, Chief, 226
Creation myths, 179–94
Cremony, John C., Major, scholar and military officer, 223, 228, 229, 235
Crook, Gen. George, 227
Culin, Stewart, monograph on 'American Indian Games,' 168, 169
Curtis, Natalie, references to, 142, 152, 155, 161, 162, 276. *See* Burlin, Mrs. Natalie Curtis
Cushing, Frank, on rain symbols, 109; on the pot as a 'Made Being,' 111, 112; on folktales, 178, 179

Dall, Dr. William H., on the origin of the Indians, 207
Dances, 149–51, 236, 265. *See* Ceremonies
De Huff, Elizabeth Willis, 103; Indian farce described by, 167, 168
De Huff, Mr. and Mrs. John, 103
De Posada, 30
Dedication of a New House, song, 163
Densmore, Frances, 158
Devil Dance, 151, 236
Dinè (Deneh), name of Navajos, 250
Dinosaur, 210
Divorce, 59, 64, 65
Dolls, 58
Doniphan, Capt. Alexander B., 251, 252
Dorsey, Dr. George A., on sand paint-

ing, 102; on Indian ritual, 121, 127; his description of Mohaves, 304
Douglas, Prof. A. E., his tree-ring studies, 216
Dress, 42–46
Dry painting. *See* Sand painting
Dualism, in pueblo ritual, 120
Dwellings, 39–42
Dyers, 277, 284, 285

Eagle, feathers of, 50, 121
Eagle Dance, 149, 151
Eagle plaques, 21
Early Pueblo period, 213, 214
Education, 58, 59, 171–73
'Emergence, The,' Navajo story, 287
Enchantment, 203
Escalera, Fray Luis de, 274
'Exit of life and being,' 111

Family and clan, 54
Farces, 167, 168
Farming. *See* Agriculture
Feather Dance, 151
Feathers, as decorative objects, 110, 112, 121
Fewkes, Dr. J. W., quoted on symbolism of corn, 52; of Bureau of Ethnology, 87; pendant described by, 95; his studies in symbolism, 106, 108, 109; on Powamu Ceremony, 127
Fire-Making Dance, 151
Firing, of pottery, 84
Flannels, 282
Florence Canal, 295
Flute ceremony, 20, 131, 140–42
Flute Societies, 140, 142
Folktales, 177–79
Food, of Indians, 47–52
Foot ball, 169
Fort Sumner, 283. *See* Hual-Te
Four, the number, importance attached to, by the Indians, 113, 114, 203

Gallo race, 170
Gallup, New Mexico, 99, 150
Games, 168–71
Garces, Father, 297
Garden of the House God, Song from the, 158
'Germantown,' blanket, 283, 284
Geronimo, Chiricahua chief, 226, 227
Geronimo's Medicine Song, 161, 162
Gila River, 294, 296
Gila River Reservation, 294, 297
Gobi Desert, 210
Goddard, Dr. Pliny Earl, on formalities following childbirth, 62, 63; burial procedure described by, 65; on the origin of the Indians, 210
Gods, the, 196–201, 236, 237, 264
Goldfrank, Esther, on etiquette attending childbirth, 63, 64
Go-ma-los, chosen to go to Washington, 255, 256
Gopher Song, 157
Gotal LIII, song of, 165
'Grandfather's education,' 58
Grant, Pres. U. S., 255–58
Graves, articles found in, 66
Great Period, 213
Great Plumed Serpent, drama 127–29
Green Corn Dances, 31, 149
Gridley, James E., on the origin of the Indians, 207
Grinding. *See* Corn-grinding
Guthe, Dr. Carl E., on pottery-making, 80, 82

Hair, the dressing of, 44, 45
Hano, language of, 11, 19; history of, 19
Havasupai Canyon, Arizona, 210
Havasupais, 301, 302
He-Hea Katzina Song, 161
Henderson, Alice Corbin, quoted, 68
Hewett, Edgar Lee, quotations from, 2, 116; quoted on siege of Black Mesa, 27, 28; of American School of Research, 87; on the Indian's view of the deific power, 119, 198; on Corn Ceremony, 148
Hogán, 260
Hollister, Urich S., on blanket designs, 285
Holmes, Dr. William H., his studies in symbolism, 106–08; on the origin of the Indians, 209

Hominy, 51
Hopi Snake Ceremonial. *See* Snake Dance
Hopis, their language, 11, 19; history of, 19–21, 24, 31, 32, 35; clan distinction among, 55; wedding ceremonies among, 60–62; childbirth among, 62, 63; their belief as to 'breath-body,' 65; weaving practiced by, 69, 70; basketry among, 72, 73; pottery of, 90; sand painting practiced by, 99, 101, 102; their blankets, 275, 276
Horn, Scout Tom, 221, 226
Hostin Tla, his account of the going to Hual-Te, 255–58
Hough, Dr. Walter, wedding ceremonies at Oraibi described by, 60–62; on the Palululong Ceremony, 128; on Snake Ceremony, 135, 136; on Flute Ceremony, 140–42; preparations of runner described by, 169
Houses. *See* Dwellings
Hrdlicka, Dr. Ales, on the origin of the Indians, 207
Hual-Te, The Going to, 255–58

Indians, of the Southwest, their view of Nature, 2; as a feature of the landscape, 2; little influenced by contact with whites, 9; name and origin of, 9; their appearance, 10; as runners, 10, 11; languages of, 11; characteristics of, 12, 13; at the time of the Spanish Conquest, 14, 215; in the sixteenth century, 15; food of, 47–52; family, tribe, and clan of, 54; their philosophy of life, 195–204; origin of, 205–11; periods of, 212–15; causes of degeneration of, 214, 215; dates of, 216; reconstruction of history of, 217
Inter-Tribal Ceremonial and Fair, 145, 151
Irrigation, 48
Isleta, history of, 21, 22
Isleta del Sul, 22

Jahano-ai (Sun-bearer), 93
James, G. W., on blankets, 281, 282, 286
Jemez, history of, 22, 23; house-ownership at, 55; marriage at, 59, 60
Jewelry, 98
Jicarillas, 224, 233, 240–42

Kabotie, Fred, 103
Kachinas, 129, 130, 201
Kayenta, 214
Kearny, Gen. Stephen W., 225
'Keepers of the Trail, The,' 19
Kidder, Albert Vincent, quoted on condition of Indians in sixteenth century, 15; on decline of pueblo arts, 78, 79; on early Indians, 211–15
Kiva, 42
Korosta Katzina Song, 160, 161
Koshare, 148, 149, 167
Kroeber, A. L., quotations from, 292, 303; references to, 301, 306
Kwatroa, pottery-maker, 19, 21

Labor, division of, 56, 57; increasing, 65
Lagon, 142
Laguna, language of, 11; history of, 23
Lalakonti Dance, 72
Lalakonti Society, 142
Land, communal holding of, 54
Language, of the Southwest Indians, 11, 19
Largo, Sarcilla, Navajo chief, 252
Lindquist, C. E. E., 21; his 'Indian Survey,' 241
'Line of life,' 111
Loom, 277
Los Cerillos, mines, 94
Lover's Lament, 164
Lover's Wooing or Blanket Song, 163, 164
Lummis, Charles F., his knowledge of Indians, 32; on Indian training, 171–73; quotation from, 220; on the Warrior Apache, 230, 231

Ma Pe-we (Velino Shije), 103
McDowell, Malcolm, report of, 294, 306
McDowell Reserve, 306
McGonigal, Major, 226

Magpie Song, 158
Maize. *See* Corn
Mamzrauti Order, 142
'Manchester cloth,' 282
Mano, 41
Manuelito. *See* Chee Teasi-Ah
Marau, 142, 143
Maricopahs, 293, 294, 300
Marks, ceremonial, 122
Marriage, 59, 60, 64
Martinez, Crescencio. *See* Ta-E
Martinez, Maria, artist-potter, 83, 85, 88
Martinez, Maximiliana, artist-potter, 83
Mason, Dr. Otis T., 71, 74
Matthews, Dr. Washington, on sand painting, 99–101; on Navajo religion, 263, 264, 266, 271
Medicine, the term, 202
Medicine man, 172, 173, 201, 202, 266
Medicine Song, 165, 166
Medicine woman, 137
Merriam, Lewis, 21
Mesa Verde, 214, 216
Mescal, 233, 233 *n.*
Mescaleros, 221, 223, 224, 233, 239, 240
Metate, 41
Mexicanization, of Indian life and religion, 146
Miles, Gen. Nelson A., 227
Mines, 94
Mishongovi, history of, 24
Mission of Santo Buenaventura, 18
Missions, among the Hopi, 20
Mocking-Bird, Song of the, 155, 156
Moenkopi, history of, 24
Mojave-Apaches, 306
Mojaves, 301, 303–05
'Moqui,' 19
Moral principles, 204
Mosaics, turquoise, 95
Mountain Chant, 271, 272
Music, Indian, 141, 154, 155
Mystery play, at Cochití, 147
Mythology, Indian, 177–79, 236
Myths, 179–94

Nambé, history of, 24
Nampeyó of Hano, artist-potter, 19, 21, 84, 87, 111
Nature, the Indian's view of, 2
Navahú, 250
Navajos, their language, 11; sand painting practiced by, 99, 101; Creation myth of, 181–94; rounded up by Kit Carson, 223; their adaptation to new conditions, 247, 248; marry outside their clan, 248; no 'type' of, 248; their reservation, 249; their name, 249, 250; origin, 250; a nation of horsemen, 250; thievery of, 250, 251; their arts, 250, 251; making of First Treaty with, 251–53; conquest of, 253–55; exile of, 255–58; since their exile, 259; dwellings, 260; dress, 260, 261; occupations, 261, 262; their council, 262; religion, 262–65; ceremonies, 265, 266; charts, 266–72; have advanced in numbers and wealth, 272; their relation to whites, 272, 273; their knowledge of weaving, 274, 275 (cf. 69, 70); their loom, 277; their spinning, 278; their blankets, 278–90
Necklaces, 95, 97
Needles, 304, 305
New Fire Ceremony, 144
New Mexico, ceremonials, 145–51
Night Chant, 265–71
Niman, 130

Ojos Calientes, 221
Oñate, Juan de, 29, 221, 274
Ooqöl, 142–44
Oraibi, history of, 24, 25; wedding ceremonies at, 60–62

Pach, Walter, on Indian painting, 104
Painted Desert, 210
Painting, sand, 99–102, 122; watercolor, 103, 104; as a profession, 104, 105
Palululong Ceremony, 127–29
Papagos, 297–300
Papagueria, 297
Parsons, Dr. E. C., on marriage, 59, 60

Pena, Tonita, 104
Petroglyphs, 102
Pfeiffer, 254
Pictographs, 102
Picurís, history of, 25, 26
'Pillow-top,' 289
Pimas, 293–97
Pinole meal, 51
Plymouth Brethren, 303
Pojuáque, history of, 26
Popè, medicine man, 29
Population, 64
Portamento, 155
Post-Basket-Makers, 212, 213
Potsherds, 77, 79
Pottery, modern Indian, 86–92; the open line on, 110, 111; the spirit in, 111; commercial and ceremonial, decorations of, 112
Pottery-makers, 19, 21–23, 28–32, 35, 36, 83–85, 87, 88
Pottery-making, 77–85, 107
Powamu Ceremony, 102, 127, 203
Powell, J. W., quoted, 177; on the religion of the Zuñis, 198
Prayer sticks, 121
Prayer to the Thunderbird, 268–71
Prayers, 159, 160, 266
Pre-Pueblo period, 213
Priest, 201, 202
Proprietorship, of family home, 55
Pueblo, Indian, 38
Pueblo, Indian village, 39; on summer morning, 53
Pueblo Bonito, turquoise beads from, 95
Pueblo tribe, 54
Pueblos, at time of Spaniards, 7, 14; at present, classification of, 16; histories of, 17–36

Quanawahu, Nicholas, running feat of, 11

Race, Song of the, 157
Racing, 169, 235
Rain, in Southwest, variations in, 3; prayers for, 4; symbols of, 4, 109, 114; vegetation adapted to supply of, 5; animal life adapted to supply of, 5, 6; snake ceremony a prayer for, 139; invocations for, 158–60. *See* Water
Redwoods, in North America and in Gobi Desert, 210
Religion, of the Indian, 195–204
Reservations, Chiricahua, 226; Tularosa, 226; White Tail Canyon, 240; White Mountain, 243, 244; near Roosevelt Dam, 243; Camp Verde, 243; San Carlos, 243, 244; of Navajos, 249; Salt River, 293, 297, 300; Gila River, 294, 297; San Xavier, 299; Colorado River, 305; McDowell, 306
Rio Grande pueblos, 146, 147
Rituals, 197
Roman Catholic religion, and Indians of New Mexico, 146–48
Roybal, Alfonso. *See* Awa-Tsireh
Roybal, Antonita, artist-potter, 83
Rug, the term, 284 *n*. *See* Blankets
Rug chart, 279
Runners, Indian, 10, 11

Saalako, medicine woman, 138
Sacaton, Arizona, dam near, 296
Salt, 52
Salt River Indian Agency, 294, 306
Salt River Reservation, 293, 297, 300
San Carlos Agency, 243
San Carlos dam, 296
San Carlos Indians, 242–44
San Felípe, history of, 26
San Ildefonso, history of, 27–29; pottery ware of, 80, 87, 89
San Juan, history of, 29; pottery wares of, 89
San Xavier Reservation, 299
Sand painting, designs used in, 99; process of, 100–02; at admittance to fraternities, 122
Sandía, history of, 26
Santa Ana, history of, 29, 30
Santa Clara, history of, 30; pottery wares of, 89
Santa Fé, artist colony of, 104
Santa Fé Fiesta and Fair, 145
Santo Domingo, history of, 30, 31; pottery wares of, 89, 112; Corn Ceremony at, 103, 147, 148

Saunders, Charles Francis, 21; quoted on the pueblo, 38
Saunders, E. H., 21
Scalp Dance, 236
Scalping, 236
Sedgwick, Mrs. W. T., on religious beliefs of people of Ácoma, 113; on the number four, 113, 114; on singing, 179
Sells Superintendency, 300
Serpents, drama of, 127–29
Sewing, 70
Shalako, the, 36
Shaman, 201, 202
Sheep, introduced in America by Spaniards, 274
Shells, 96, 97
Shimopovi, history of, 31
Shipaulovi, history of, 31
Sia, history of, 31; marriage at, 64; pottery wares of, 90
Sichumovi, history of, 32
Sikyabotoma, runner, 169
Silver ornaments, 97, 98
Slipping, 83
Snake, as symbol, 113
Snake Ceremony, 131–39
Snake Dance, 20, 21, 25, 35, 72
Snake Fraternity, 132
Snake Society Race, 132
Snowbird Dance, 150
Solaluna, 125, 126
Song, its importance in the life of an Indian, 152, 154; is an appeal or a relation, 152
Songs, Indian, 142; varieties of, 153, 267; theme of love absent from, 154; instruments accompanying, 154; samples of, 155–66. *See* Chants
Soul, after death, 65, 66
Southwest, the, the Indian of, 2–8; the region of, defined, 7; character of, 7, 8, 38
Spanish Conquest, 14
Spinning, 278
Spondilidæ, 97
Stevenson, Mrs. M. C., her studies in Indian symbolism, 106, 111
Stock-raising, 50
Sun Dance, 149
Swanton, 202
Swastika, 113, 203
Symbolism, in the arts, 75, 76, 106–14; use of word, 106 *n*. *See* Symbols
Symbols, in painting, 99, 102; in arts, 106–08; in use at time of Spaniards, 108; conventional, 108; for water and rainfall, 109; predominant power expressed by, 109, 110; of animals, 110; feathers as, 110; the 'line of life,' 111; the 'visible heart,' 112; the swastika, 113; snake, 113; two main ideas of, 114; of corn ears, 121; in sacred practices, 203; in blankets, 285–87; of colors, 287

Tabu, 203
Ta-E, water-colorist, 103
Taos Pueblo, history of, 32–34
Tesuque, history of, 34, 35
Tewas, the, 19
Thunderbird, Prayer to the, 268–71
Thunderbird Dance, 149
'Tiponi,' 121
Tontos, 221
Totem, 54
Town Crier, Song of, 156, 157
'Traditional gap,' 111
Training. *See* Education
Tree-ring studies, 216
Tribe, pueblo, 54
Triple League, 253
Tuba City, 20
Tularosa Reservation, 226
Turkey, feathers of, 50, 121
Turquoise, 93–96
Turquoise beads, 95
'Turquoise Kiva,' 95
Turquoise-matrix, 94
Turquoise mosaics, 95
Turquoise Mountain, mines, 94
'Turquoise Woman,' 93
Turquoise Youth and Turquoise Maiden, 94
Tusayan, Province of, 20

Underworld, 65, 66
United States Government, their treatment of the Indians, 227–29, 237–39, 272, 273, 295, 296, 298, 299

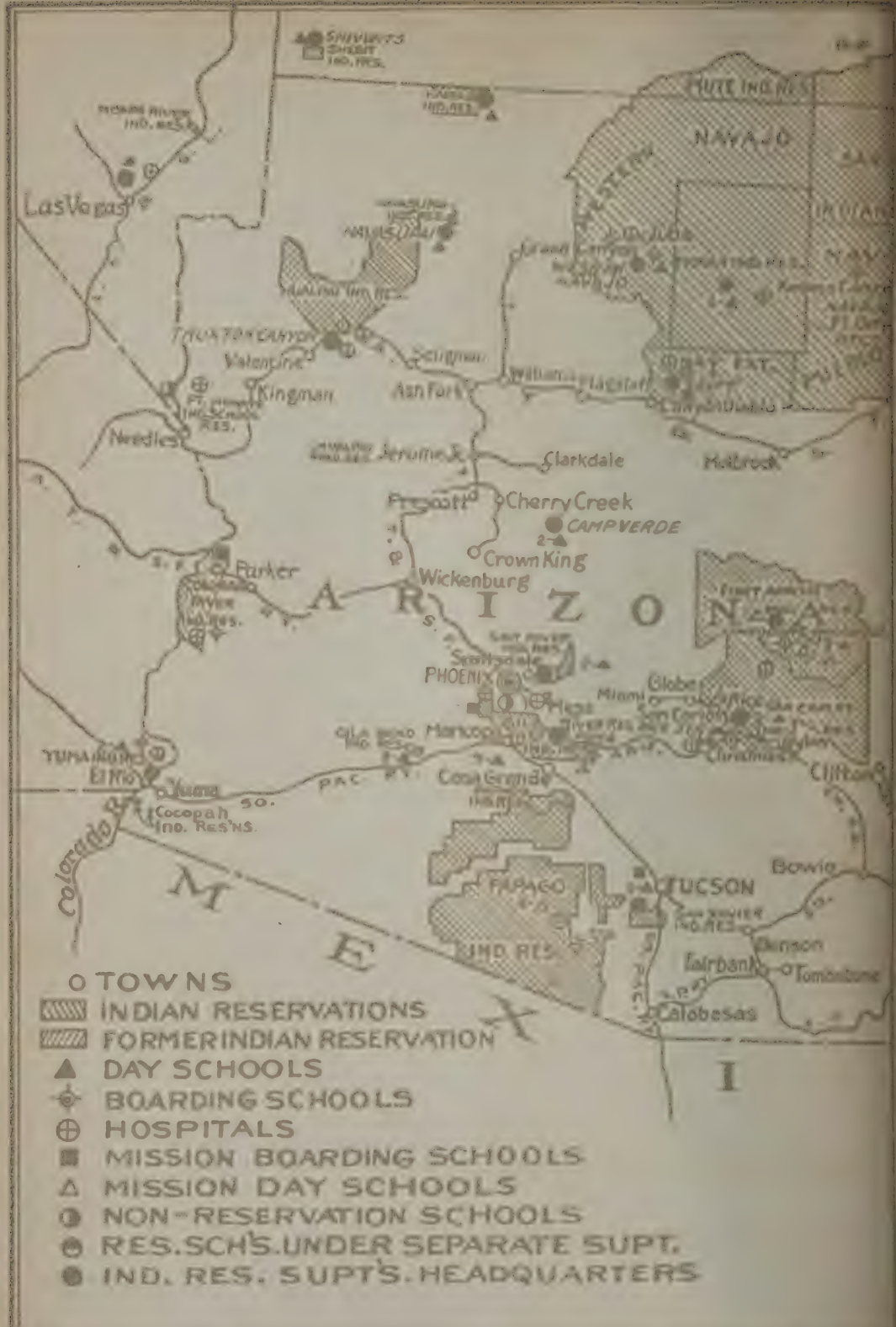
Vaca, Cabeza de, 293
Vegetation, of Southwest, adapted to rainfall, 5
Verrill, A. Hyatt, on the origin of the Indians, 206, 208, 209
Victorio, Chiricahua chief, 226
'Visible heart,' 112

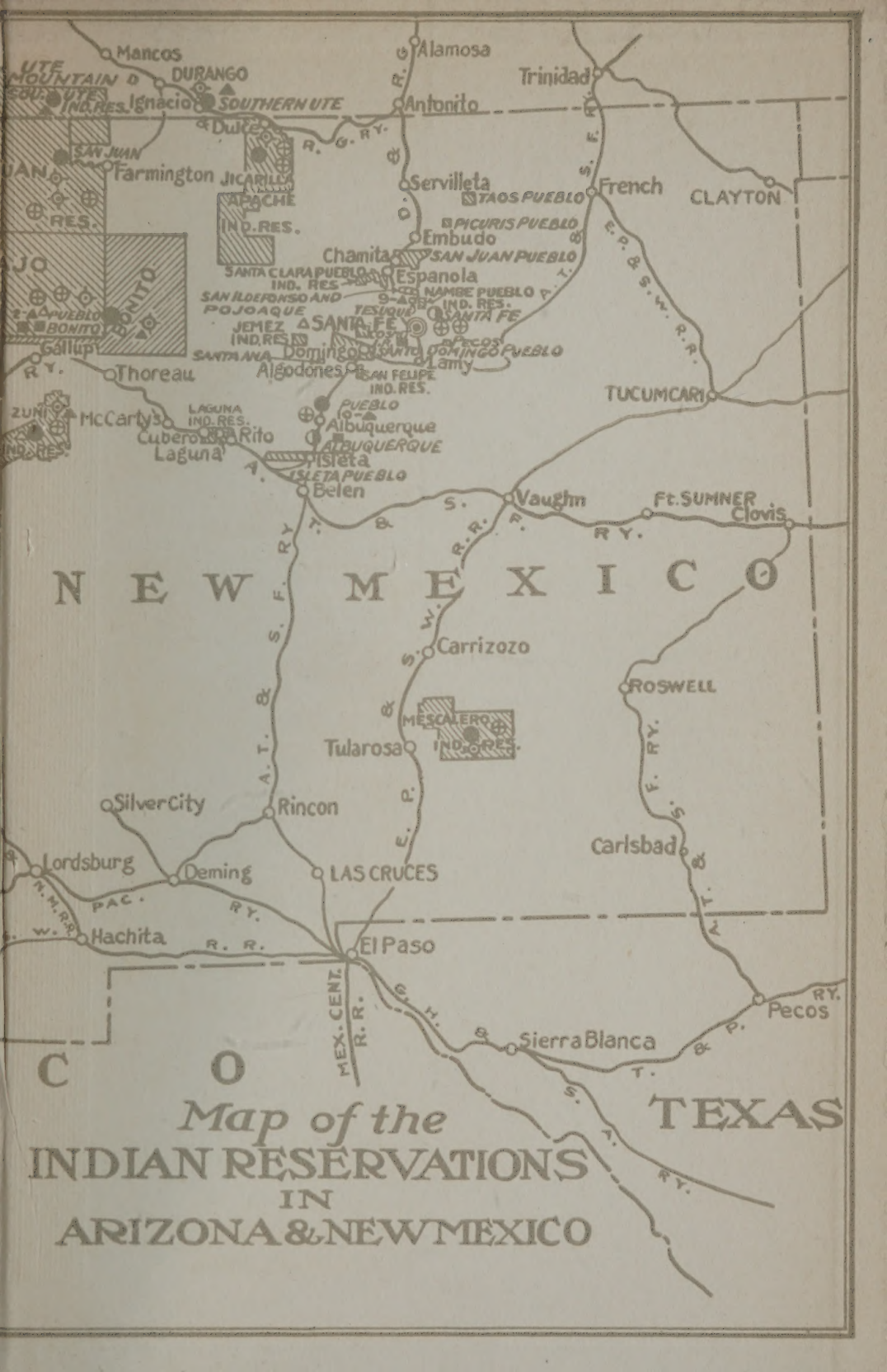
Walapais, 301–03
Walpi, history of, 35; Snake Ceremony at, 131
Water, importance of, in the Southwest, 3; symbols for, 109. *See* Rain
Water-color painting, 103, 104
Weaving, 69, 70, 107; among the Navajos, 274–90
Wedding ceremonies, 45, 60–62
Wheel, unknown to the Indian, 209
Wheel Dance, 150
White Mountain reservation, 243, 244
White Tail Canyon, reservation at, 240
Wissler, Dr. Clark, quoted, 79; on the origin of the Indians, 206
Witchcraft, 203
Woman's Board of Home Missions, 300
Women, labor of, 56, 62
Wool, preparation of, 278
World War, Indians in, 239

Yuman tribes, 301–07
Yumas, 301, 306, 307

Zuñis, language of, 11; history of, 36; weaving practiced by, 69, 70; pottery wares of, 90; Creation myth of, 179, 180

BOSTON PUBLIC LIBRARY
3 9999 09773 933 6


Las Vegas
Kingman
Valentine
Truxton Canyon
Needles
Parker
Prescott
Cherry Creek
CAMP VERDE
Crown King
Wickenburg
Clarkdale
Jerome
Ash Fork
Williams
Flagstaff
Holbrook
Navajo
Hopi
PHOENIX
Globe
Miami
Mesa
Tempe
Casa Grande
Florence
Yuma
Cocopah
Clifton
Bowie
TUCSON
Benson
Tombstone
Fairbank
Calabasas
Papago
Colorado
MEXICO
ARIZONA
TOWNS
INDIAN RESERVATIONS
FORMER INDIAN RESERVATION
DAY SCHOOLS
BOARDING SCHOOLS
HOSPITALS
MISSION BOARDING SCHOOLS
MISSION DAY SCHOOLS
NON-RESERVATION SCHOOLS
RES. SCH'S. UNDER SEPARATE SUPT.
IND. RES. SUPT'S. HEADQUARTERS


Mancos
DURANGO
Ignacio
SOUTHERN UTE
Alamosa
Trinidad
Antonito
Dulce
Farmington
JICARILLA APACHE IND. RES.
Servilleta
TAOS PUEBLO
French
CLAYTON
PICURIS PUEBLO
Embudo
Chamita
SAN JUAN PUEBLO
Espanola
SANTA CLARA PUEBLO IND. RES.
SAN ILDEFONSO AND POJOAQUE
NAMBE PUEBLO IND. RES.
TESUQUE
SANTA FE
JEMEZ IND. RES.
SANTO DOMINGO PUEBLO
Gallup
Thoreau
SANTA ANA
Algodones
Lamy
SAN FELIPE IND. RES.
TUCUMCARI
ZUNI
McCarty's
LAGUNA IND. RES.
Cubero
Rito
Albuquerque
Laguna
Isleta
ISLETA PUEBLO
Belen
Vaught
Ft. SUMNER
Clovis
NEW MEXICO
Carrizozo
ROSWELL
MESCALERO IND. RES.
Tularosa
Silver City
Rincon
Carlsbad
Lordsburg
Deming
LAS CRUCES
Hachita
El Paso
Pecos
Sierra Blanca
TEXAS
Map of the
INDIAN RESERVATIONS
IN
ARIZONA & NEW MEXICO

MY PEOPLE THE SIOUX

By Chief Standing Bear

'ONE of the most interesting books I have read in a long while.' — *Mark Van Doren* in *The Nation.*

'Here is a story written by a blanket Indian, the first son of a fighting Sioux. Aside from its beauty and naïveté, the book is invaluable. It is history.' — *William S. Hart.*

'Chief Standing Bear's book is not faked. It is true as Pepys, or Evelyn, or Wilfred Blunt, or Carl Sandburg. There's a sort of noble self-revelation in it; a bluntness and directness, very wholesome, of which no notion could be gained by quotations, but which make an indelible impression. The story runs swift and straight. . . . Any one who knows brass from gold will find vastly more of value and interest in Standing Bear's book than the mere tale told of happenings.' — *Charles Finger in the New York World.*

History and Politics

THE INTIMATE PAPERS OF COLONEL HOUSE

Arranged as a Narrative by CHARLES SEYMOUR

Volume III. Into the World War. Volume IV. The Ending of the War. The true story of America's share in the War and in the Peace.

MY WAR MEMOIRS *By* EDUARD BENES

The foreign minister of Czecho-Slovakia tells the absorbing story of the revolutionary movement that led to the building of the new state.

THE PHILIPPINE ISLANDS *By* W. CAMERON FORBES

The complete and definitive history of America's first adventure in colonial administration, written by the former Governor-General of the Islands.

PARTY BATTLES OF THE JACKSON PERIOD

By CLAUDE G. BOWERS

A timely, new Anniversary Edition of one of the best of recent American histories.

THE GREAT REVOLT IN CASTILE

By HENRY L. SEAVER

An absorbing study of one of the most picturesque episodes in the reign of Charles V of Spain.

THE AGE OF THE GODS *By* CHRISTOPHER DAWSON

A study in the origins of culture in prehistoric Europe and the Ancient East.

HOUGHTON MIFFLIN COMPANY